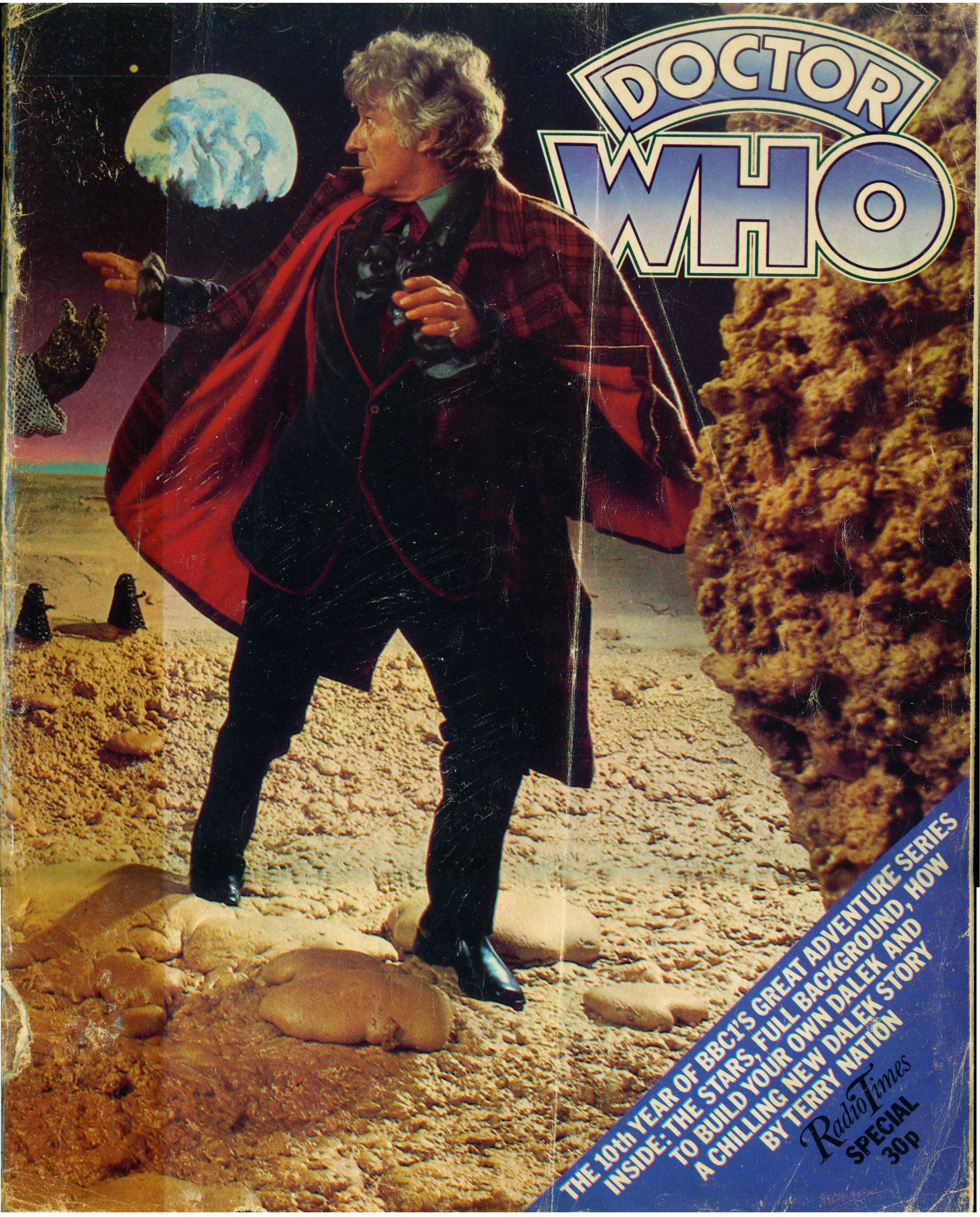
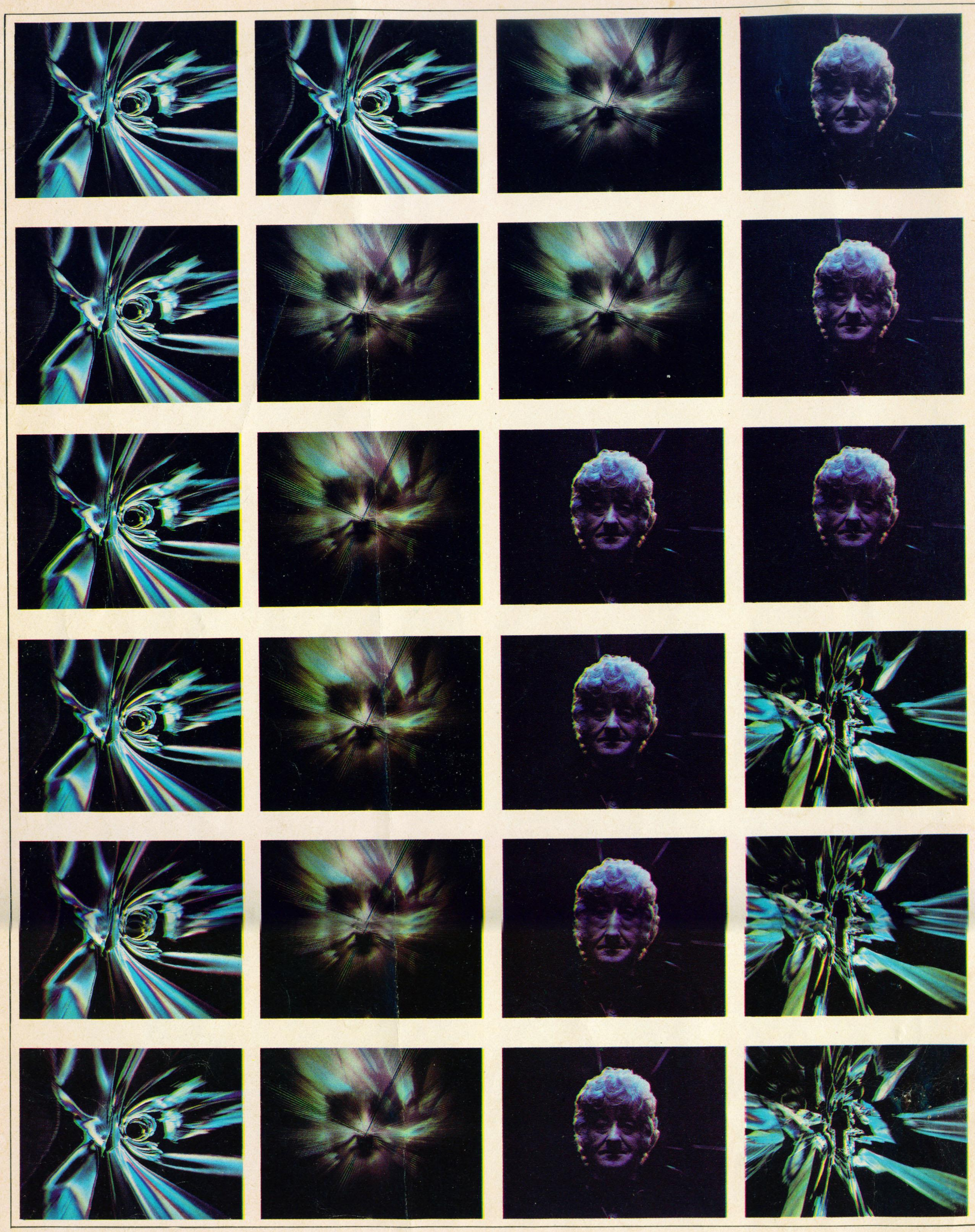
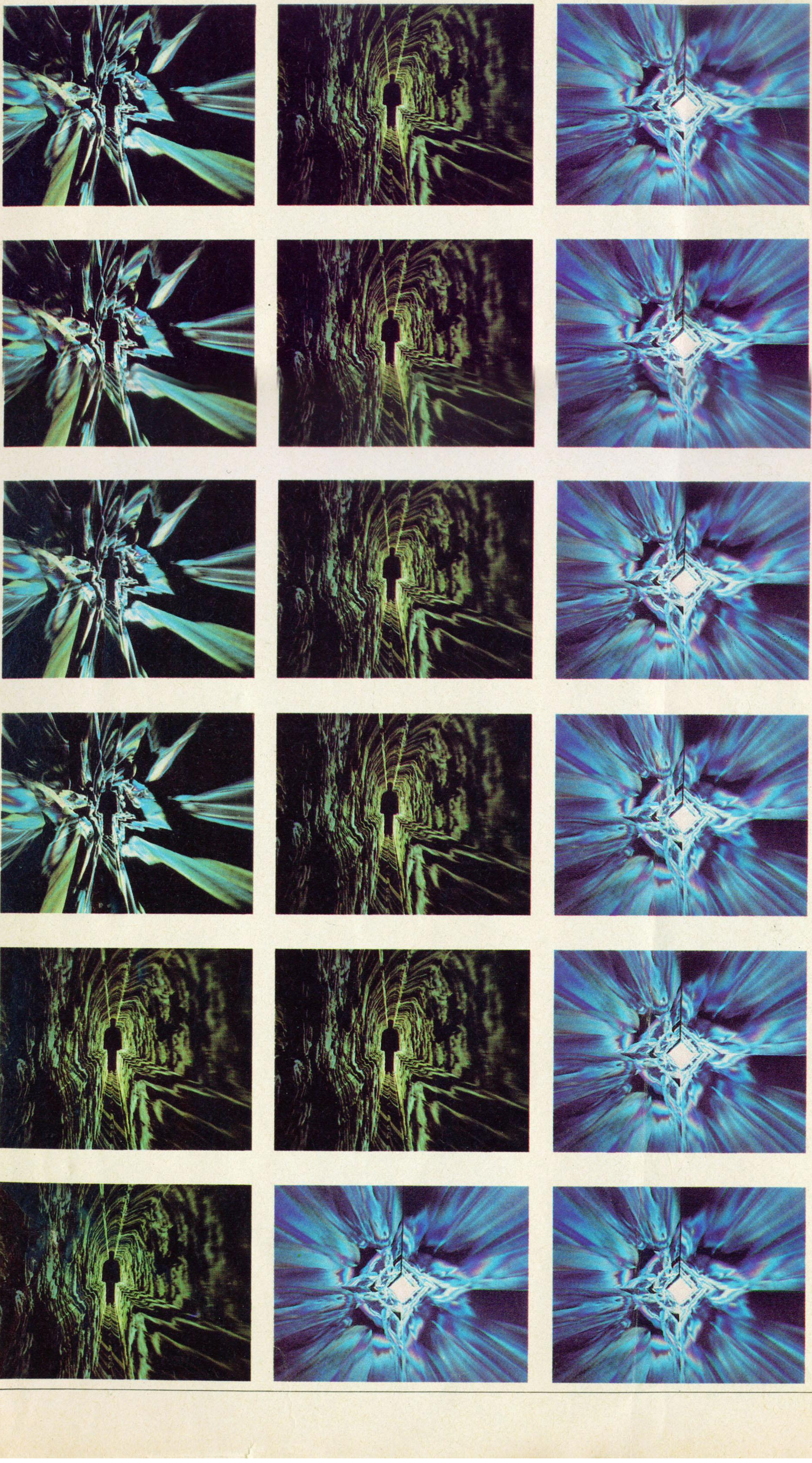
DOCTOR WHO

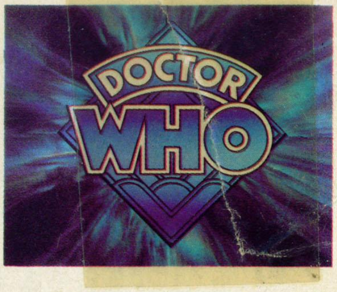


THE 10th YEAR OF BBC1'S GREAT ADVENTURE SERIES
INSIDE: THE STARS, FULL BACKGROUND, HOW
TO BUILD YOUR OWN DALEK AND
A CHILLING NEW DALEK STORY
BY TERRY NATION

Radio Times
SPECIAL
30p







This *Radio Times Special* is to mark the 10th anniversary of *Dr Who,* BBCtv's adventure series which is followed by 9 million dedicated addicts . . .

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Producer **Barry Letts** and Script Editor **Terrance Dicks** are the only full-time members of the *Dr Who* team. Says Letts: '*Dr Who's* success is that it doesn't have a formula – it's flexible. The Doctor's appeal is that he's a superman – and yet he's fallible. Supermen are always interesting, but they're that much more interesting if they're a bit human, too. And we try and make everything that happens scientifically plausible. We take a premise – like a monster landing in London – and interpret it as logically and realistically as possible. The Doctor is a strongly moral man, who always searches for peaceful solutions.'

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THE CHANGING FACE AND NATURE OF DR WHO

William Hartnell (1963-6) was Doctor No 1, an eccentric Victorian septuagenarian dressed in frock-coat and winged collar. Irascible, petulant, intolerant

Patrick Troughton (1966-9) was Doctor No 2, a zany, extravagant, improvising clown, whose off-beat humour helped to take the terror out of the scary parts

Jon Pertwee (1970-) is Doctor No 3, a dashing man of action much addicted to gadgets and spectacular forms of transport. He is flamboyant but precise

Meet the Doctors, pages 6 and 7

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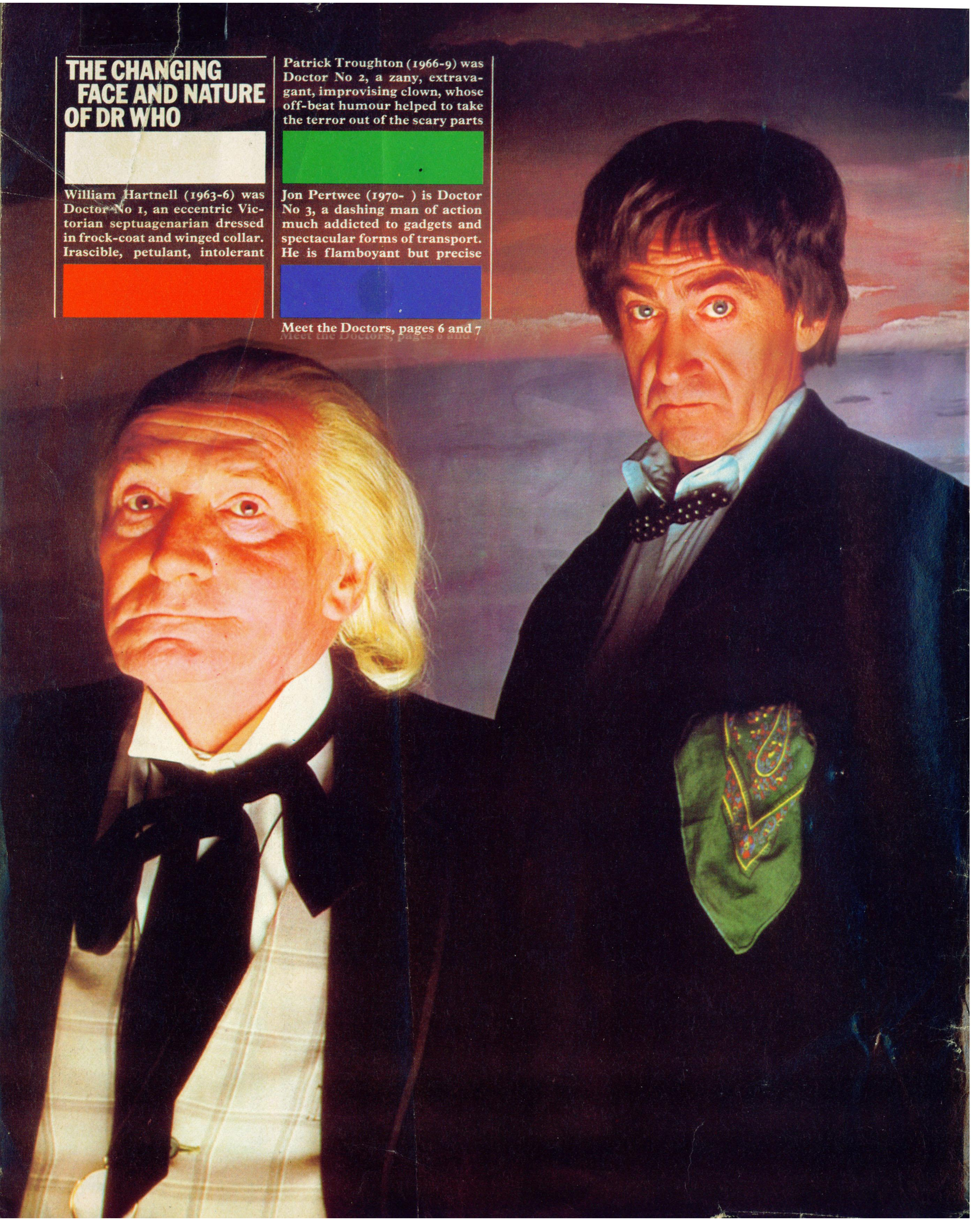
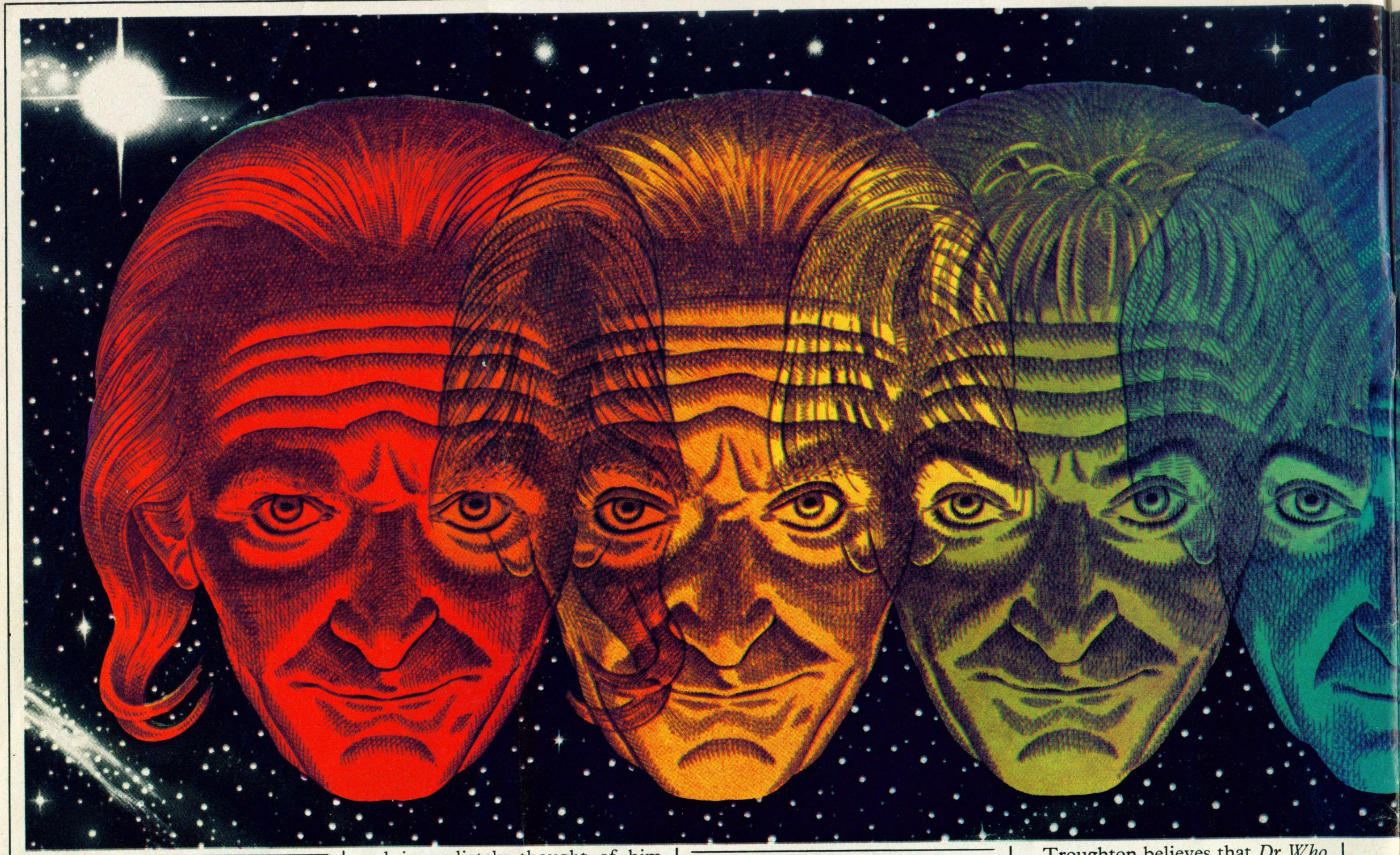




I WAS LAUGHED AT AND MOCKED FOR MY FAITH IN DR WHO

William Hartnell says that, for him, *Dr Who* really was just what the doctor ordered. For years he'd been playing what he calls 'a bunch of crooks, sergeants, prison warders and detectives,' and suddenly here was what he saw as 'an eccentric old grandfather-cum-professor' to transport him to a very different acting realm.

'It may look like hindsight now, but I knew – I just knew – that *Dr Who* was going to be an enormous success,' he says. 'Don't ask me how. Not everybody thought as I did. I was laughed at and mocked a good deal for my initial faith in the series. But I believed in it. I remember telling producer Verity Lambert right at the start: "This is going to run for five years." And now it's ten years old.'

It was Miss Lambert who spotted Bill Hartnell for the role. She'd seen his performance as the seedy old Rugby League talent-scout in the film *This Sporting Life*, and immediately thought of him for the Doctor.

His three years as Dr Who were, he says, as tough as any rep tour. 'We did it 48 weeks a year in those days.' But he loved it and immersed himself in the part. 'You know, I couldn't go out into the High Street without a bunch of kids following me. I felt like the Pied Piper.

'People really used to take it literally. I'd get letters from boys swotting for O-levels asking complicated questions about time-ratio and the Tardis. Dr Who might have been able to answer them. I'm afraid I couldn't.

'But *Dr Who* is certainly a test for any actor. Animals and children are renowned scene-stealers and we had both – plus an assortment of monsters that became popular in their own right. Look at the Daleks. They started in the second series and were an immediate success.'

The *Dr Who* moment he remembers best didn't take place in the studio. He'd been asked to open a local fete, so he dressed in his Dr Who clothes and turned up in an old limousine owned by a friend. 'I'll never forget the moment we arrived,' he says. 'The children just converged on the car cheering and shouting, their faces all lit-up. I knew then just how much *Dr Who* really meant to them.'

I MELLOWED DR WHO AS THE SERIES PROGRESSED

Patrick Troughton admits he was very reluctant to play Dr Who. 'To be quite honest,' he says, 'I had a feeling that it had perhaps been done to death and that it wouldn't last.'

He felt his interpretation of the Doctor had to be 'wildly different' from William Hartnell's characterisation. 'Sydney Newman, then head of BBCtv Drama, said: "All right. Do what you like with him. Play him like Charlie Chaplin if you want to."

'So we went through a lot of costume ideas, like making him a rather tough, seafaring man, a windjammer Captain or something like that. But Sydney obviously had the Chaplin idea well in mind. In the end he said: "But whatever happened to the cosmic hobo?" So we compromised. In the beginning I played him very clownish. But I mellowed him as the series progressed. He was always off-beat, but I tried to make him human.'

Troughton believes that *Dr Who* could sometimes be a frightening programme for young children, so he wanted his Doctor to be a re-assurance. 'It watered the frightening bits down if there was a chap there who said: "It's all right. Don't worry." I made him see the fun in situations, too.'

He admits he became very bound-up with Dr Who while he was playing him. 'When you're playing a part for a long time you certainly take on some of the mental attitudes of the fellow you're playing. Luckily Dr Who was a very jolly fellow and I just bubbled along.'

The Yeti were his favourite creatures – 'lovely things, I had a very soft spot for them' – and he remembers his days on the programme with much fondness. 'It was such fun and the people were so nice. Michael Craze and Anneke Wills were marvellous to me when I first started. It must have been extremely difficult for them, being used to William Hartnell's Doctor.

'And then I was very lucky having Frazer Hines, Deborah Watling and Wendy Padbury with me for so long. Somehow, I always used to find myself running with Frazer and Debbie. As I was the Doctor I felt I had to out-run them, but they were young and I was old and it was difficult.'

Peter Brookes

I HADN'T REALLY FOUND MYSELF BEFORE DR WHO

Jon Pertwee rocks gently in a hammock by the side of his swimming pool, sips a glass of *sangria* which his German-born wife Ingeborg has just mixed for him and makes a leisurely survey of the landscape. Below his white colonial-style villa the ground slips away into scrubland and dusty mountain roads. In the distance the sun glints on the ancient battlements of Ibiza, capital of the tiny Spanish island of the same name which he has chosen to make his holiday home for the last 16 years.

He looks tanned and fit, relaxing in a hammock only because his back was playing him up. In the last series of *Dr Who* it was necessary for him to disappear out of camera sight, as though he'd fallen. The director said: 'All you need do is duck your head.' Instead, Pertwee attempted a backward leap, fell badly on the mattress which had been prepared for him and jarred his spine. Typical. He is, by his own admission, a daredevil and an adventurer.

He says: 'I work as hard as possible for nine months of the year in order to play very hard for three.' Here in Ibiza 'playing hard' includes skin-diving, water-skiing and roaring his tiny motor bike around the mountains.

Pertwee has been able to get to grips with an assortment of vehicles right from his first *Dr Who* appearance. He's always on the look out for new gadgetry (his 'Whomobile' car is due to make its appearance in the new adventure, *Invasion of the Dinosaurs*).

He helped to design the Whomobile with two engineers from Nottingham, who specialise in sprint cars. Shaped like a flying saucer and powered by what Pertwee calls 'a pepped-up' engine, you have to lie down to drive it, rather like a Grand Prix racing car. It seats two and inside there's a TV, stereo, telephone and what he mysteriously describes as 'a computer bank.'

Pertwee became Dr Who in 1970. 'I'd been working on the radio series *The Navy Lark*. One day I was talking to actor Tenniel Evans and he said: "Pat Troughton is leaving *Dr Who*. Why don't you put yourself up for the part?"

'I said: "That's a ridiculous idea. I might have always been known as an eccentric, not only in my life but theatrically too, but I'm still considered by most people as a light comedian." Anyway, I rang my agent and he thought it a very stupid idea, too. But we phoned the *Dr Who* producers and they said: "May we read you our short-list for the part?" My name was on the list. It was most weird.'

When he was finally offered the part it came down to the vital question – how should he play it? It was suggested that the problem could be simply solved: 'Play it just like yourself.'

Pertwee's immediate reaction was: 'That's very difficult. I don't know what me is.' He says now: 'I hadn't really found myself before *Dr Who*. I was always scared of myself.'

He feels he owes a big debt to the directors who've worked with him on the programme. Pertwee admits he has his own way of getting things done, and says: 'I appreciate terribly the way directors have accepted my way of working.'

What is his way of working? 'Well,' he says, 'I seem not to take things seriously. My main concern is to make people feel at home. And we do laugh uproariously and we behave very badly at times. But the atmosphere on *Dr Who* is always a fun atmosphere. And we always get the work done just the same.'

He says he loathes the Daleks – 'I think they're boring, but people love them so I suppose I'm wrong – and though he's not a great science fiction person he's inclined to believe in UFOs – 'but why won't the blighters land?' He also thinks it's crazy that *Dr Who* should be labelled 'violent.'

'It's got to be a bit scary. My boy has a place under the table where he watches it from. But he doesn't have nightmares about it. He *likes* being scared by it. If parents write to me and say their kids are scared I write back and say: "Well, it's very simple. You lean forward, put out your hand and turn the switch to the off position".'

His favourite monsters are the Draconians and he feels the masks look superbly authentic. He remembers: 'We were on location once and I was talking to an actor dressed as a Draconian during a break in shooting. There we were, sitting on top of a gravel pit in Reigate talking about outer space and life on other planets. I became completely engrossed in the conversation and suddenly realised that, quite unconsciously, I was talking to the man as though he really were a creature from another world. A most weird experience. It just goes to show how *Dr Who* gets into your blood.'

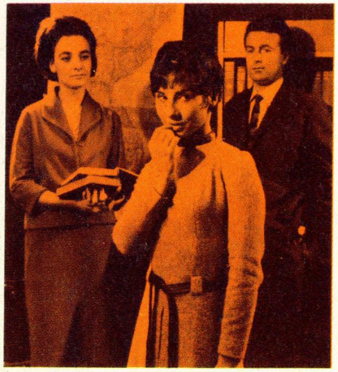
DOCTOR WHO

1963/4

AN UNEARTHLY CHILD

(*4 episodes*) **by Anthony Coburn**

Susan Foreman, 15, is Dr Who's grand-daughter and goes to Coal Hill School, London. Two teachers, Ian Chesterton and Barbara Wright, go to investigate her home background. 'Home' is a police box which is in fact a Tardis (standing for Time and Relative Dimensions in Space), Dr Who's dimensionally-transcendental spaceship. The old Doctor plunges them all back to the Earth of 100,000 BC – and capture by a skin-clad tribe which has lost the secret of fire. Two leaders, Kal and Za, are in a power struggle. The Doctor shows Za how to make fire, by rubbing two sticks together. Za wants them to stay, but by a ruse they escape to the Tardis.



THE DEAD PLANET

(*7 episodes*) **by Terry Nation**

On the planet Skaro live the blond Thals and the Daleks, both survivors from an atomic war. After generations of mutation the Thals have become perfect human beings. The Daleks, who lost the use of arms, legs and bodies, are an evil intelligence housed in a protective metal casing. A Thal tells Susan that his race is starving. She asks the Daleks to help. But they set a trap and the Thal leader Temmosus is killed. In a counter-attack the Daleks – powered by static electricity from their city floors – are beaten by cutting off the current, leaving them immobile.

THE EDGE OF DESTRUCTION

(*2 episodes*) **by David Whitaker**

In a desperate attempt to gain control of the Tardis' guidance system and return the two schoolteachers to London, 1963, Dr Who decides to experiment with a new combination. There is a violent explosion and the Tardis stops, the doors swing open and they see they are suspended in space. Susan and Barbara are convinced this is the mischief of an invisible alien fifth force, but Ian rationalises it as a technical fault. The irascible Doctor accuses the teachers of sabotage – with the intent of blackmailing him into returning them to Earth. Finally even Susan begins to suspect Ian and Barbara and tries to attack Ian with a pair of scissors – she is quietened by her grandfather. On reassessing the situation more calmly, they realise the halt has been caused by the ship's defence mechanism. Dr Who reluctantly admits he could have mis-set the controls. The Tardis has only just avoided plunging into the sun – and destruction.

THE ROOF OF THE WORLD

(*7 episodes*) **by John Lucarotti**

The Tardis lands in 1289 on the plateau of the Pamir, and the travellers meet Marco Polo, a young Venetian emissary of Kublai Khan's, who is on his way to Kublai's court in Peking, accompanied by a Tartar warlord named Tegana, a peace ambassador from the rival Mogul ruler and a Chinese girl, Ping-Cho. Marco Polo forces Dr Who to join his caravan – he wants to present the Tardis to Kublai Khan in the hope he will be allowed to return to Venice. But Tegana wants to have the Tardis too. In his attempts to steal the ship he tries to poison their water, and drills holes in their water barrels as they cross the Gobi desert, before escaping on the last horse. Because of the intense night cold, condensation forms on the Tardis, so they survive. The party arrives in Peking, Dr Who meets Kublai and they play backgammon. At first the Doctor wins 35 elephants, 4,000 horses and 25 tigers. Then the tide turns and he gambles away the Tardis. But when he exposes Tegana and saves Kublai's life, the Tardis' key is returned to him.

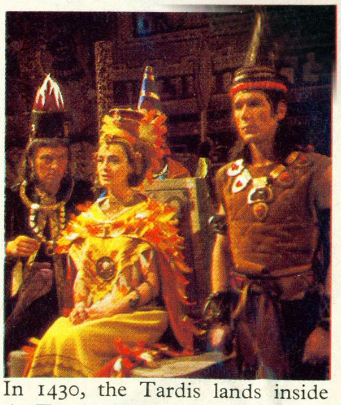
THE SEA OF DEATH

(*6 episodes*) **by Terry Nation**

The travellers land on the island of Marinus, where the sand is glass and the sea is acid. The Tardis is captured by Arbitan, Keeper of the Conscious of Marinus, a machine that controls the island absolutely fairly. But the four keys that make it function are lost. Dr Who is forced to search for them. On their return Arbitan has been murdered and the island taken over by Yartek, leader of the alien Voords. The Doctor is forced to hand over the four hard-won keys, but one is an imitation and the machine explodes – blowing itself and the Voords to pieces.

THE TEMPLE OF EVIL

(*4 episodes*) **by John Lucarotti**



In 1430, the Tardis lands inside the Tomb of Yetaxa, one-time High Priestess of the Aztecs of Central Mexico. When Dr Who, Susan, Ian and Barbara leave the tomb the door locks behind them. They meet Autloc, High Priest of Knowledge, and Tlotoxl, High Priest of

Sacrifice. Autloc hails Barbara as Yetaxa's reincarnation – she is wearing the Priestess' bracelet, which she found in the tomb. Barbara is exalted and placed on the throne; Ian is appointed chief of the Aztec warriors, finding himself in competition with the Chosen Leader, Ixta. Ian defeats him, Ixta plunging from a pyramid to his death. Susan is made a handmaiden, but she causes a rumpus when she refuses the last wish of The Perfect Victim – marriage. The Doctor rests in luxury with the esteemed elders and, although this is incongruous to his nature, flirts mildly with a beautiful elderly Aztec lady, Cameca. This, however, is partly to learn from her a way into the tomb to retrieve the Tardis. Barbara is declared bogus after she petitions against human sacrifices, but the crew escape – the Doctor opens the tomb door with an old-fashioned wheel-and-pulley.

STRANGERS IN SPACE

(*6 episodes*) **by Peter R. Newman**

The Tardis lands on the deck of a gigantic spaceship from 28th-century Earth. Its Captain Maitland explains they are under the control of a race called the Sensorites, who live on Sense-Sphere planet. They are all physically identical, with huge, bald, bulb-shaped heads. Through telepathic communication with Susan, the Sensorites invite them to Sense-Sphere for talks. They explain they know the spaceship has discovered metal molybdenum on Sense-Sphere, and they are wary of being exploited. The Sensorites fear humans, for since a previous spaceship left many of them have died. Dr Who discover deadly nightshade in the city's water reservoirs and tracks down the culprits to underground caves – three deranged spacemen left behind from the previous expedition.

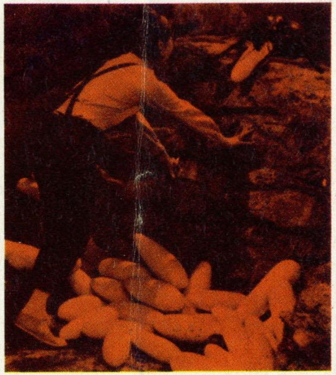
A LAND OF FEAR

(*6 episodes*) **by Dennis Spooner**

The Tardis lands in a forest clearing. The travellers think it's England 1963, but they are 20 kilometres from Paris during Robespierre's Reign of Terror. A farmhouse is sacked by Government troops; Dr Who is concussed and left for dead, the others dragged off to prison. The Doctor gets everyone involved in a counter-revolutionary plot by an English spy disguised as an official, who is planning Robespierre's downfall.

PLANET OF GIANTS

(*3 episodes*) **by Louis Marks**

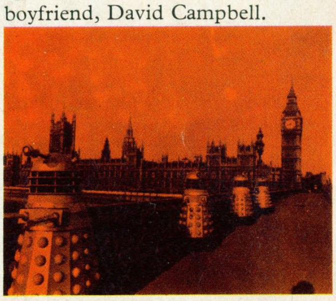


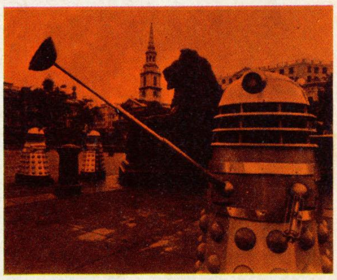
The doors of the Tardis open. All readings indicate complete normality – but the time-travellers are only one inch tall! A crooked manufacturer, Forester, intends to capitalise on a new insecticide, DN6, which aims to increase food production for starving nations. He realises, however, that eventually the product will destroy every living thing, for its molecules are stable instead of ephemeral. A Government Inspector, Farrow, discovers this but is murdered by Forester before he can reveal the plot. This deed is witnessed by the miniaturised Ian and Barbara. Dr Who, against almost insurmountable odds – they are vulnerable to such hazards as being washed down plug holes and tumbling into matchboxes – stops Forester from publishing his bogus report, using a gas jet and match to cause an explosion – that goes off in the evil Forester's face.

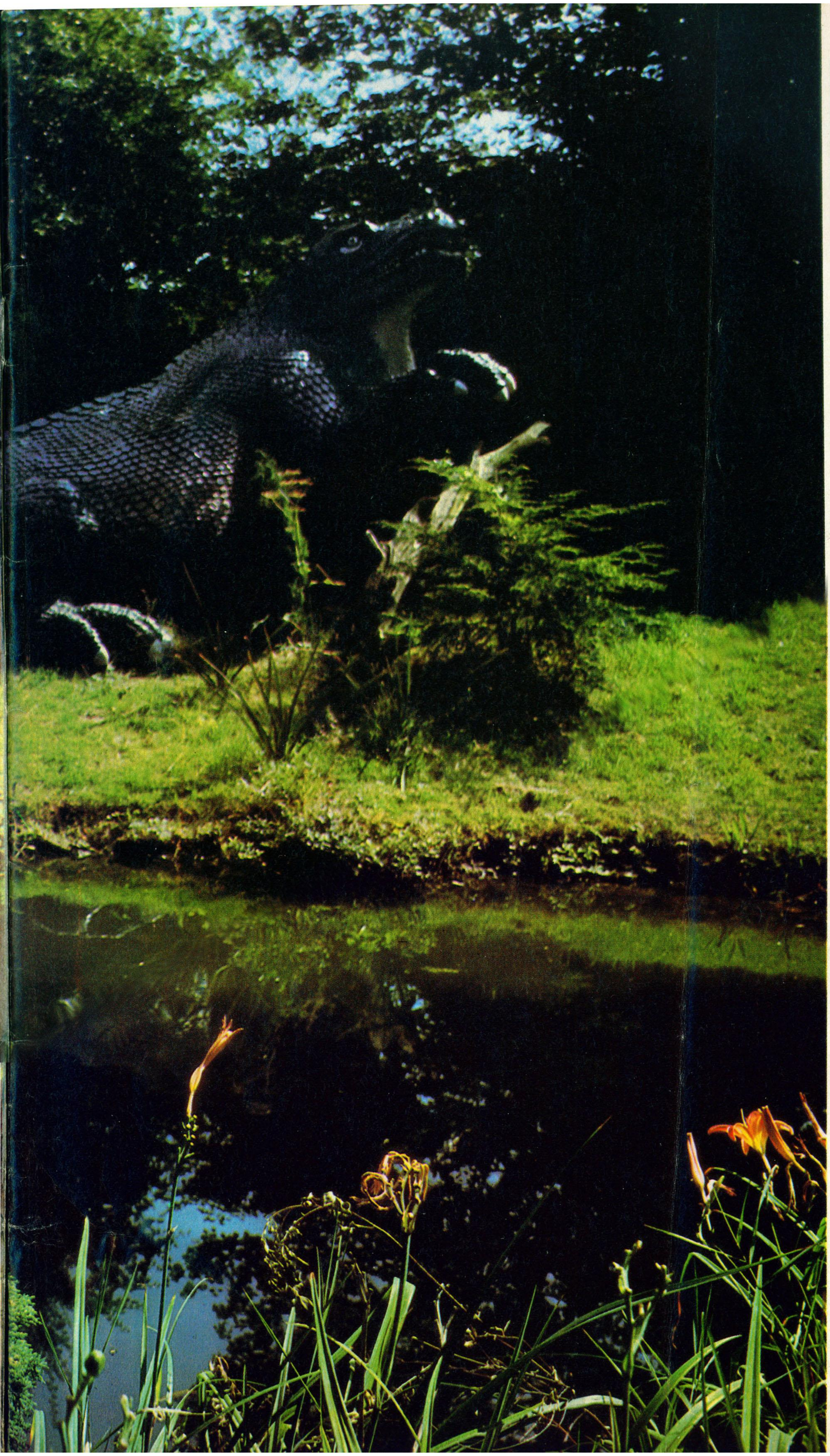
WORLD'S END

(*6 episodes*) **by Terry Nation**

London in 2164 – and the Daleks have invaded Earth, making many thousands of inhabitants into Robomen – human Dalek servants – by clamping metal control discs to their heads. Other slavemen have been shipped to Bedfordshire, where the Daleks have a vast mining complex: they have discovered a fissure in the Earth's inner shell, through which they aim to remove the planet's core and replace it with a magnetic power system, so they can pilot Earth anywhere in the Universe. Dr Who and Ian are captured by Robomen and taken to the Dalek Supreme, who tries to change the Doctor into a Roboman, strapping him to an operating table in the Robotizer Chamber of a flying saucer parked in Trafalgar Square. The rest of the Tardis crew escape from London and head for the mining fields, where Ian faces the lusts of the Slyther – the Dalek's man-eating pet. Susan and a freedom fighter named David Campbell manage to gain entry and destroy the Dalek's radio network with a bomb – created by the scientist Dortmun. This feat immobilises the Daleks' control and the Doctor orders the Robomen and the slaves to rise against the Daleks. Earth is preserved – and Susan, deeply in love, opts to stay behind with her new boyfriend, David Campbell.







THE ANIMAL SKINS WE WORE WERE FULL OF INSECTS!

'I was doing one of *The Wednesday Plays* when Waris Hussein, the original director of *Dr Who,* spotted me,' says **Carole Ann Ford.** ' He was up in the control box and I was on the set – screaming. I think they chose me because they wanted a good screamer. I certainly did an awful lot of it!

'I played Susan Foreman, the Doctor's grand-daughter. It was never really explained how she came to be with him, but it was sort of accepted that they'd escaped together from another planet.

'Susan was originally going to be quite a tough little girl – a bit like *The Avengers* lady, using judo and karate – but having telepathic communication with the Doctor. Then they decided they wanted me to be a normal teenage girl so that other teenage girls could identify with me. But I was allowed to keep my scientific mind.

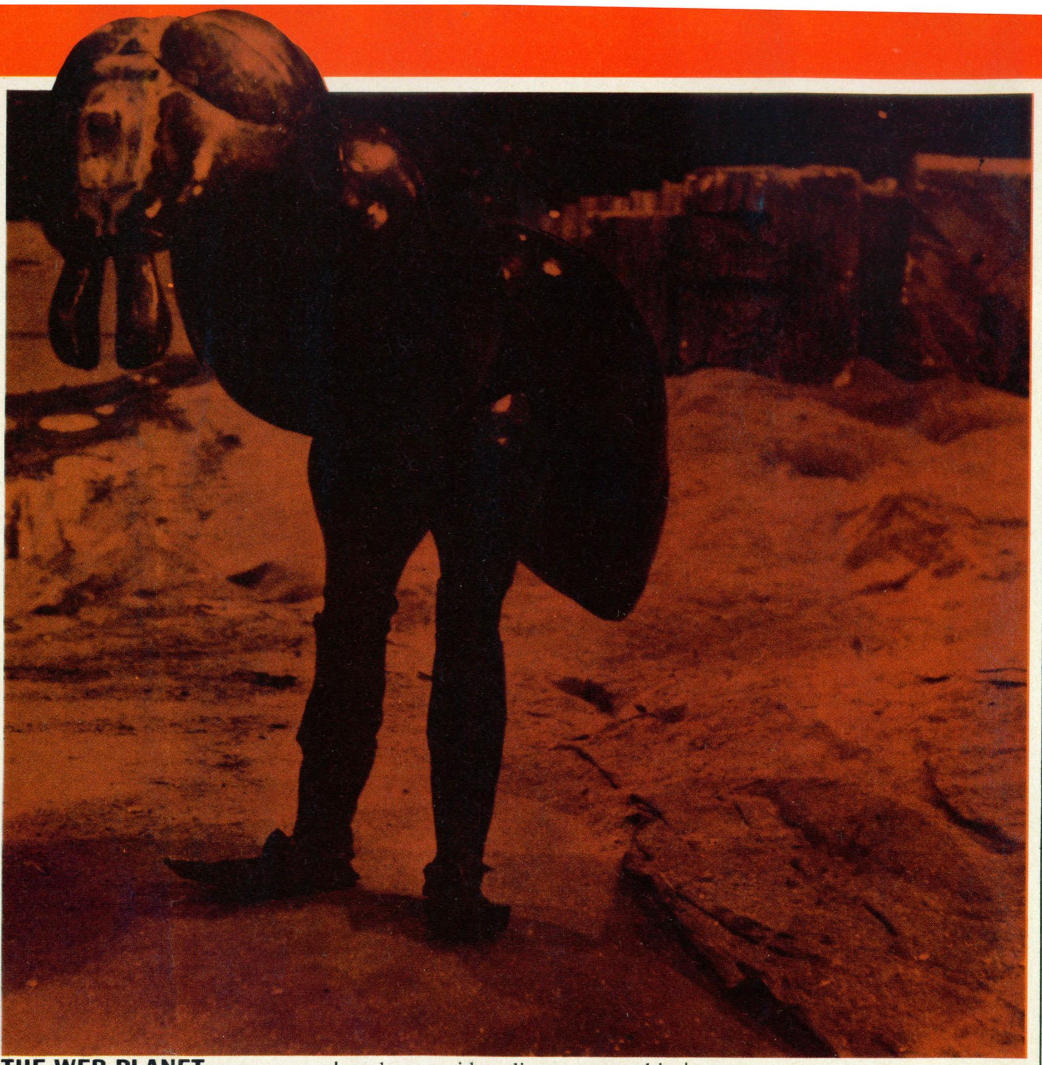
'At the beginning, *Dr Who* was intended to be more scientific and less monstery. It was going to be quite historical, with lots of to-ing and fro-ing in time, meeting historical figures. I shall never forget the first episode. It was being transmitted live, and just before we were to go on news came through of President Kennedy's assassination. It was a shattering shock to us all.

'That first story was about the Stone Age and I nearly got eaten alive – but not by monsters. A lot of tropical plants had been brought into the studio for the set, and they were full of insects. So, too, were the animal skins we had to wear. I had to be fumigated after filming!

'But the impact of the series was immediate. We thought it was going to run for eight weeks, but it overtook us all. The Tardis was very popular. It was only supposed to be a police box for the first series and then it was due to change to fit in with any new surroundings – an oak tree one week, maybe an ionic column the next. But the police box caught on, so it was retained.

'You may not remember it now, but the Daleks were originally little men *inside* the shell, the outer part just being a protective covering. Only once did we ever see a "real" Dalek. We blew one up and the top came off. A little shrivelled hand appeared over the edge, followed by a dying Dalek groan.'

1965



THE POWERFUL ENEMY

(2 episodes) **by David Whitaker**
Dr Who lands on the planet Dido in the year 2493. Exploring, he finds a crashed spaceship from Earth with two survivors – a paralysed man named Bennett and a young girl, Vicki. Bennett tells the Doctor the rest of the crew has been murdered by the locals, and Vicki says a native named Koquillion is protecting them from the further wrath of the enraged Didonians. The Doctor is suspicious of these explanations and challenges Koquillion – to find he is Bennett in disguise. Bennett confesses he murdered all the spaceship crew and the friendly Didonians, to conceal a murder he had previously committed on the spaceship. He had planned to take Vicki – she is oblivious of his crime – back to Earth to witness his innocence. However, two Didonian survivors terrify Bennett into plunging over a cliff to his death. The Doctor offers Vicki a chance to join his crew: she accepts.

THE SLAVE TRADERS

(4 episodes) **by Dennis Spooner**
The Tardis crew have been resting up in a villa outside Rome in the year AD 64, while its owner campaigns in the Gallic wars. When Vicki and the Doctor visit Rome, Barbara and Ian are captured by slave-traders – Ian is sold as a galley slave and Barbara to the court of Nero. Dr. Who is mistaken for Maximus Pettulian, celebrated musician and enemy of Nero, and is taken to the Emperor's Palace (the Doctor cannot play a note of music). Ian escapes from the galley ship, only to be sent to Rome as a gladiator, where he encounters Barbara. With his spectacle lens the Doctor sets fire to the plans Nero has rejected for his 'perfect city' – inspiring Nero for the Great Fire of Rome, under cover of which the crew of the Tardis escape back to the villa.

THE WEB PLANET

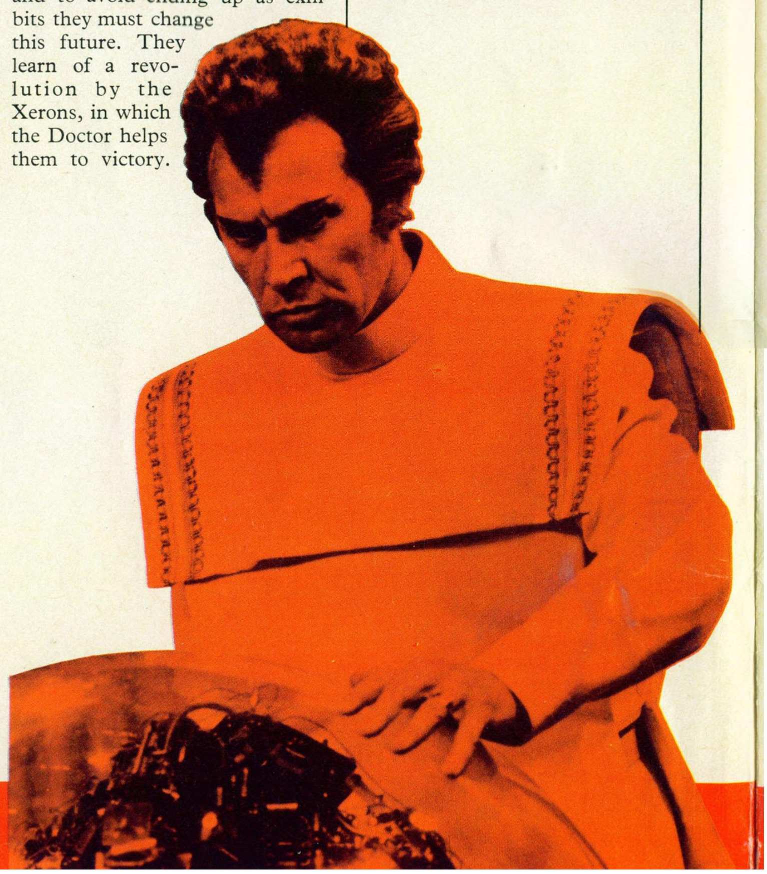
(6 episodes) **by Bill Strutton**
On the planet Vortis, Barbara is captured by the insect-like warmakers, the Zarbi. Dr Who frees the Zarbi from their evil controller, so they and the butterfly-like Menoptra can live together in peace.

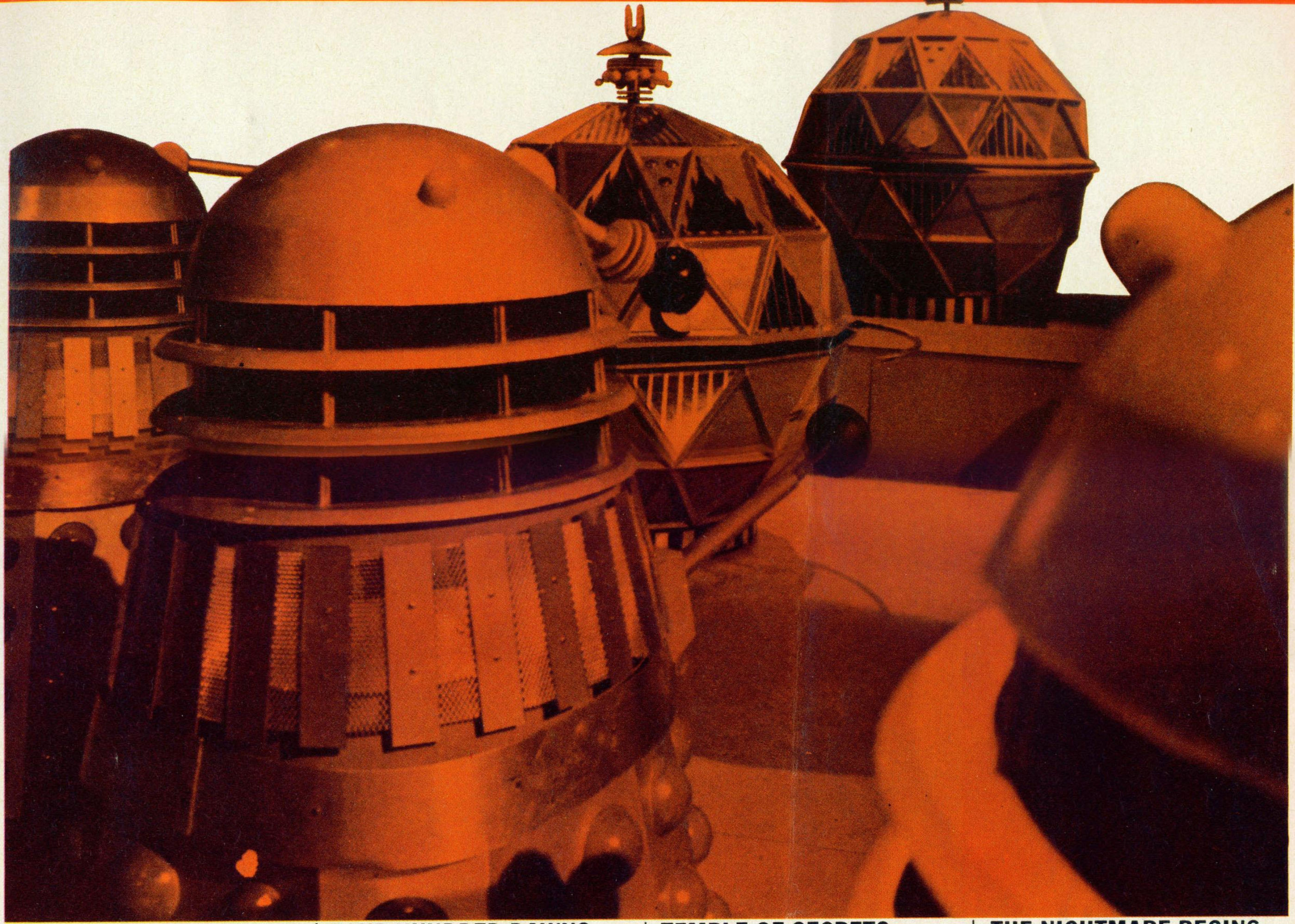
THE LION

(4 episodes) **by David Whitaker**
Twelfth-century Palestine: Saracens, led by a Saladin emir, El Akir, wait to ambush Richard the Lionheart. Dr Who gets involved. Richard plans for peace by arranging a marriage between Saladin's brother Saphadin and his own sister, Joanna. But Joanna refuses. The Doctor and Vicki narrowly escape being burnt at the stake.

THE SPACE MUSEUM

(4 episodes) **by Glyn Jones**
The white dust planet of Xeros has been made into a Space Museum, devoted to the display of the warlike Morok Empire's historical conquests – including familiar enemies like the Daleks. The Doctor – who has become invisible – sees their own replicas in the museum, and realises the Tardis has jumped ahead in time and to avoid ending up as exhibits they must change this future. They learn of a revolution by the Xerons, in which the Doctor helps them to victory.





THE EXECUTIONERS

(6 episodes) **by Terry Nation**

On the jungle planet of Mechanus Dr Who meets Steven Taylor, survivor from a spaceship crash. Daleks battle with Mechonoids.

THE WATCHER

(4 episodes) **by Dennis Spooner**

Tardis materialises on the rocky east coast of England in 1066. There they are puzzled to find a modern wristwatch and a tape-recorder. Their owner, the Monk, is another time-traveller, now planning to ensure Harold wins the Battle of Hastings with atomic bazookas. It takes all Dr Who's ingenuity to upset the Meddling Monk's plans. Finally he removes the Monk's dimension controller, leaving his Tardis stuck in 1066.

FOUR HUNDRED DAWNS

(4 episodes) **by William Emms**

A planet in Galaxy Four is about to spin out of orbit, so the women-dominated Drahvins plan to escape in the spaceship of the planet's other inhabitants, the Rills. The Doctor lends power from the Tardis for the ship of the gentle humane Rills to escape destruction.

MISSION TO THE UNKNOWN

(1 episode) **by Terry Nation**

This one-off *Dr Who* adventure reintroduced viewers to the programme after the summer break. The setting is the planet Kembel, whence information of mysterious happenings has reached the Space Special Security Service. Agent Marc Cory is despatched there to investigate, but almost at once disaster strikes: his crew are cut down one by one by the alien horrors which infest the planet. But what Cory discovers is of vital importance for the future of Earth: the Daleks, controlled as ever by the Dalek Supreme, are present in force on Kembel and their intention is to attempt once more the destruction of their dedicated opponents: the humanoids.

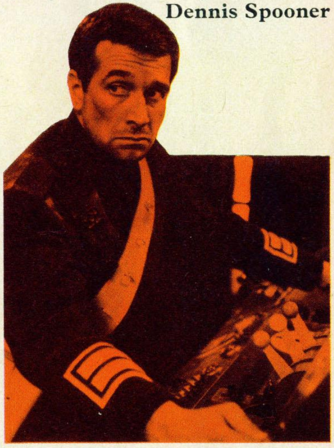
TEMPLE OF SECRETS

(4 episodes) **by Donald Cotton**

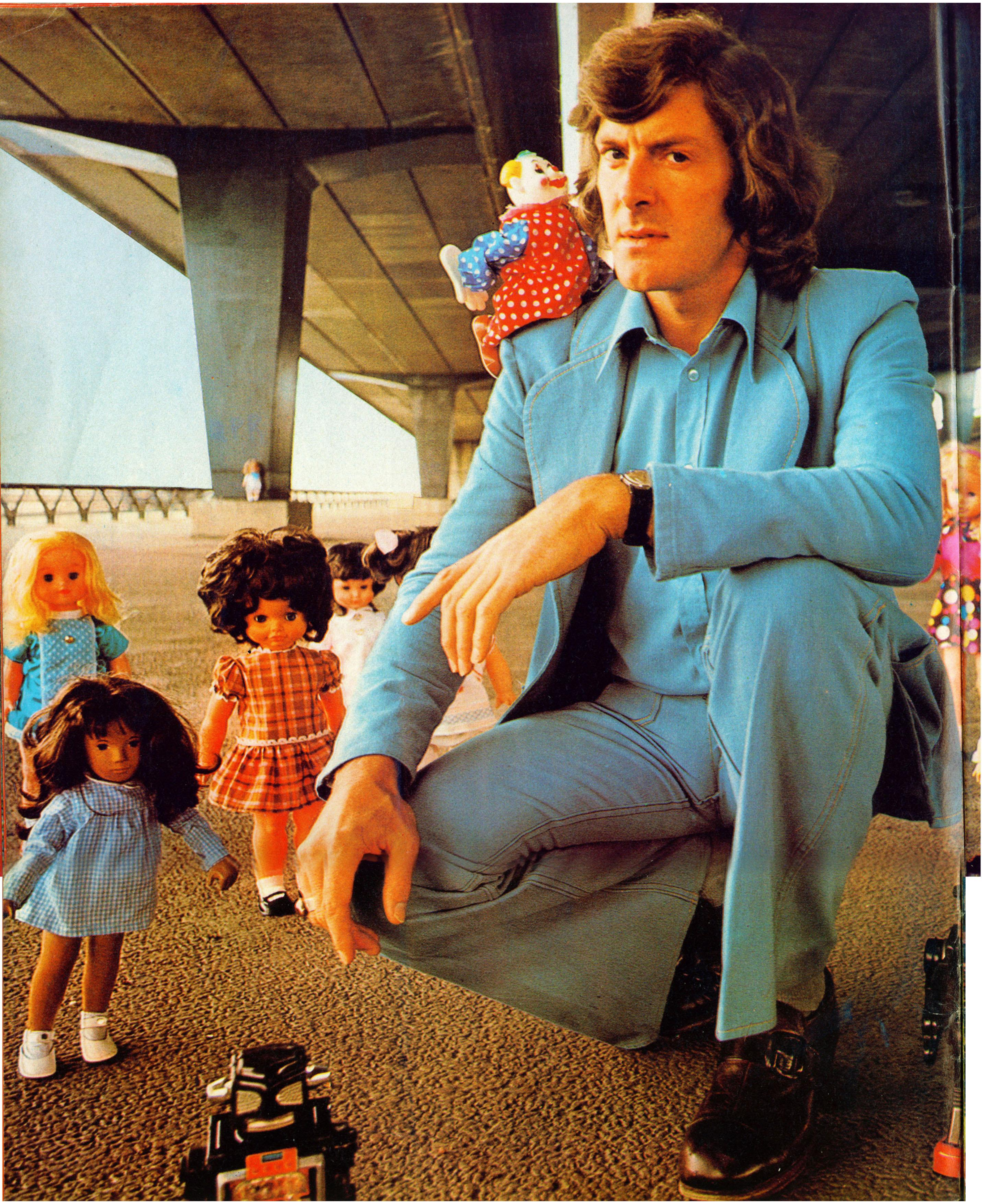
On the plains outside a beseiged Troy, Dr Who is hailed as Zeus and taken by Achilles to his camp. But a fellow-warrior, Odysseus, is sceptical as to his authenticity and gives him two days to devise a plan to capture Troy. Meanwhile the Tardis is seized by a Trojan prince and Vicki is hailed as a prophetess. She and Steven are thrown into jail and Vicki is given two days to prove her supernatural powers. At the Greek camp Dr Who decides his attack on Troy will be with a huge wooden horse. They wheel it into the city and the Greeks emerge from inside the horse, open the gates and take the city. Vicki elects to remain behind with the fleeing Trojans.

THE NIGHTMARE BEGINS

(12 episodes) **by Terry Nation and Dennis Spooner**



The Doctor lands on the planet Kembel in 4000 AD, where the space security agent Bret Vyon is trying to warn that the Daleks are about to destroy Earth. Bret is shot, being mistaken for a traitor. The Tardis lands on the volcanic planet Tigus to be pursued by the Meddling Monk (see *The Watcher*). Finally, on Kembel, the Doctor activates the time destructor, wiping out the Dalek invasion – but killing space agent Sarah Kingdom.



WE HAD TO SOLVE THE TOY-GAMES OR DIE!

'The first *Dr Who* audition I went to was for the part of a monster,' says **Peter Purves.** 'They were looking for giant butterflies and moths who could "move well." As I'd just done a season dancing in the chorus at the London Palladium I thought I'd give it a try. But the director said: "Not really for you, I think, but I'll bear you in mind when I need a human."

'Sure enough, I was cast soon afterwards as a hillbilly American who was on top of the Empire State Building when the Tardis landed there. Having done that, I was offered the part of Steven, a space pilot who'd got lost and was found somewhere in the future. Steven was argumentative and capable of making decisions for himself, if not always the right ones. Quite a together, headstrong young man. I'm sorry to say that he soon became a very watered-down, characterless person, which seemed to me a great shame.

'Looking back, I don't think I was very good. When there are monsters around there's always a tendency to overact, and I did. I've always been one for action – which is why I love *Blue Peter* now – but I got very little action in *Dr Who,* though I tried to get in on it wherever I could. The most enjoyable episodes for me were the ones when we went back in time – to the massacres of the Huguenots in France, or to ancient Greece or, once, to the OK Corral shoot-out.

'The episode I remember best – for later and personal reasons – was *The Celestial Toyroom* – in which Michael Gough played the evil Toymaker. He had contrived a number of games which the Doctor had to solve, or we'd all die! One was a genuine exercise called the Trilogic Game, in which you have to build pieces into a pyramid in a set number of moves – but starting from the top, not the bottom. It's a game that has supposedly magic qualities.

'Anyway, I asked if I could have the one that had been used in the series and took it home. Soon afterwards I left *Dr Who.* I was out of work for more than a year. I'm not a superstitious person but one day, in desperation, I picked up the Trilogic Game and threw it in the dustbin. I got a job the following week in *Z Cars,* and *Blue Peter* came soon after.'

DOCTOR WHO

1966

WAR OF GOD

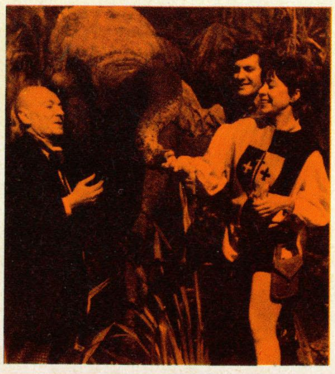
(4 episodes) **by John Lucarotti**

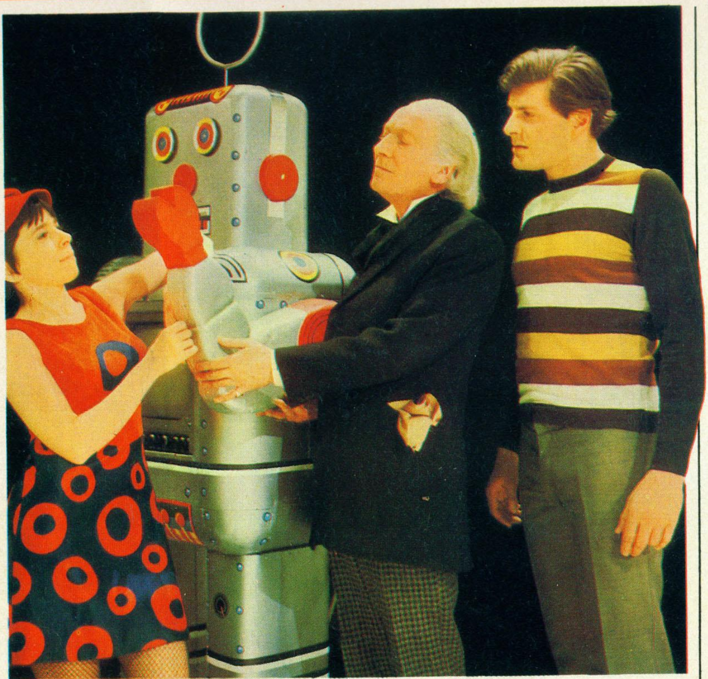
It is Paris before the Eve of St Bartholomew's, 1572, and the Catholic Queen Mother Catherine de Medici is planning to massacre all French Protestants. Dr Who and Steven arrive and Steven meets some Huguenots from the Protestant Admiral de Coligny's household. They rescue a servant girl, Anne, who has overheard the planning of the massacre plot, but the Admiral does not believe her. Later the Catholic Abbot of Amboise arrives at the Admiral's house. He is Dr Who's double. Steven believes he *is* the Doctor and follows him and overhears the plan to assassinate de Coligny. The attempt fails. The Catholic undercover leader, Marshal Tavannes, blames the Abbot for this failure and orders his execution. Dr Who and his companions escape Paris as the massacre begins.

THE STEEL SKY

(4 episodes) **by Paul Erickson and Lesley Scott**

Earth is about to be destroyed by the sun, so flora and fauna have been put aboard spaceship *Ark* (where Tardis lands), headed for the planet Refusis with millions of miniaturised humans. A reptilian slave race called Monoids bid to take over Refusis, but end up by being miniaturised themselves.





THE CELESTIAL TOYROOM

(4 episodes) **by Brian Hayles**

Tardis materialises in the domain of the Celestial Toymaker, an evil force who dominates a fantasy world. He is a happy-looking mandarin character dressed in a splendid bejewelled coat. He invites Dr Who to be his partner in the complex Trilogic Game. Steven and Dodo are set a series of puzzles and games, which if they lose will render them subjects of the Toymaker. Their first opponents are the clowns Joey and Clara, with whom they play Blind Man's Buff – and win. Then they meet the Hearts family and play a macabre game of musical chairs. After that they find themselves trying to reach the end of a ballroom dodging dancing dolls. Their fourth – and most lethal – opponent is the obnoxious schoolboy, Cyril. With him they play a death-trap dice game across electrified triangles – but manage to reach 'home' first. The Doctor triumphs over the Toymaker by imitating the magician's voice – and the travellers are on their way once again.

A HOLIDAY FOR THE DOCTOR

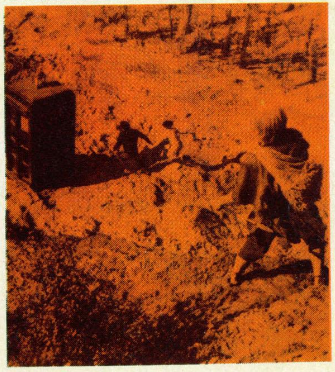
(4 episodes) **by Donald Cotton**

Dr Who, Steven and Dodo arrive in Tombstone on 26 October 1881. The Doctor has toothache and finds the local dentist is none other than the infamous Doc Holliday, who is feuding with the Clanton family. The Clantons' gunfighter, 'Snake-eyes' Harper, nearly guns down the Doctor by mistake. Marshal Wyatt Earp arrests the Doctor and rescues Steven from lynching. Pa Clanton hires gunfighter Johnny Ringo, and on to the famous shoot-out Earp winning – at the OK Corral.

THE SAVAGES

(4 episodes) **by Ian Stuart Black**

On a distant planet live the ultra-civilised Elders and the wild primitive Savages. The Tardis crew are escorted to the Elders' capital to meet their leader, Jano. Steven and Dodo are taken on a conducted tour of the city, and inevitably the curious Dodo takes a detour – and finds himself in a strange laboratory presided over by Senta. When Dodo is back with the Doctor the truth suddenly dawns: this 'advanced civilisation' has been formed by transferring the life force and energy of the Savages into the Elders. The Doctor protests, but for his pains his own life force is transferred to Jano. This means that Jano adopts some of the Doctor's attitudes – and conscience. With this new perspective, Jano goes out into the Savages' wilderness and recruits them to destroy the transference laboratory. The Elders and Savages choose Steven to be their leader, so Dodo and the Doctor leave him there to his task.



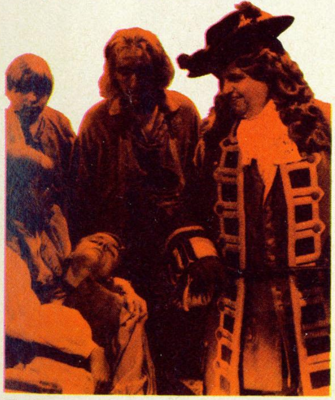
THE WAR MACHINES

(4 episodes) **by Ian Stuart Black**

The Tardis has materialised outside London's Post Office Tower. Inside it they find the plump expansive Professor Brett and his revolutionary computer called WOTAN – Will Operating Thought Analogue – a universal problem-solver that can think for itself. Suddenly the machine reverses its process and starts to take over men, beginning with Brett. WOTAN programmes them to build War Machines – self-contained mobile computers – to prepare for the invasion of mankind. Ben, a young merchant seaman who has befriended Dodo, and Brett's secretary Polly are captured, but Ben escapes and warns top civil servant Sir Charles Summer. Troops are powerless against War Machines, but by using a series of field forces the Doctor re-programmes one to destroy WOTAN. Dodo decides to stay in England.

THE SMUGGLERS

(4 episodes) **by Brian Hayles**



Ben and Polly's adventure on a wild remote part of 17th-century Cornish coast. Pirates are searching for treasure, while smugglers (who include the local Squire) are trying to sell Pike contraband. The Doctor unwittingly receives a clue to the treasure's whereabouts from the Churchwarden – just before a pirate murders him. The pirates try to extract the information from Dr Who. The Tardis' crew are rescued by the militia.

THE TENTH PLANET

(4 episodes) **by Kit Pedler and Gerry Davis**

In the late 1980s the Tardis lands at a South Pole Space Tracking Station, where its General Cutler battles with invaders from the Tenth Planet, Mondas – Earth's missing half. Mondas is draining away the energy of Earth. The planet's inhabitants appear: ruthless silver-clad figures called Cybermen, whose original bodies have been replaced with plastic to make them disease-free and invulnerable. The Cybermen land, but they are destroyed by thermo-nuclear generator rods.

POLLY WAS A WEEDY FRIGHTENED LADY

'I started acting when I was 11, so by the time I got to *Dr Who* I'd done quite a lot – plays, TV and films,' says **Anneke Wills.** 'I'd even been chucked out of RADA! But then I'd never been able to take drama training seriously.

'I suppose *Dr Who* really brought me to the public eye, though yet when I left the series I couldn't get a job for months. Over-exposure, they call it.

'I've given up acting now and spend my time with my two children as well as helping my husband, Michael Gough, to start a local arts centre on the Norfolk coast. Michael had, in fact, appeared in *Dr Who* before me, so it was really keeping it in the family.

'Michael wasn't around when I was offered the part of Polly – he was filming in South Africa – but I knew he'd enjoyed doing *Dr Who*, so I had no hesitation in accepting the part. Polly, the secretary to a scientist, first appeared in the William Hartnell days. I wanted to play her like myself – scatter-brained. Or "kooky," as the newspapers persisted in calling me. I thought it would be a very good idea to play a total coward. Television was full of brave ladies in those days. I wanted to be a sort of feminine anti-hero, a weedy, frightened lady who screamed and kicked and shouted "Doctor!" at the least sign of danger. I think Polly got a bit braver towards the end.

'I can't say I ever took *Dr Who* that seriously. I remember being amused because there was a big fuss once when a photographer took a picture of the Daleks with their heads off, and the blokes puffing away at cigarettes inside. It was thought it ruined the illusion! It was only later, when children asked me questions like: "What's it like in the Tardis?" that I realised what total reality it was to them.

'Then my own children got wound-up in it. One day, while I was away rehearsing, they saw an episode in which I got carried off by monsters. They were very worried about whether I was going to come home that night. They didn't realise that the episode they had been watching had in fact been recorded the week before, and they half-believed their poor Mum had been gobbled up by the wicked monsters! The series was much more "me" when Patrick Troughton took over, because I always felt it should have been played more for comedy.

'We played our own little joke on Patrick the first day he started. Michael Craze and I ordered some special T-shirts and we greeted our new Doctor with the words: "Come back Bill Hartnell" blazoned across our chests. It was a ghastly joke, I suppose, but dear Patrick took it very well.'

WE SPENT MUCH OF THE TIME BEING CHASED BY CYBERMEN

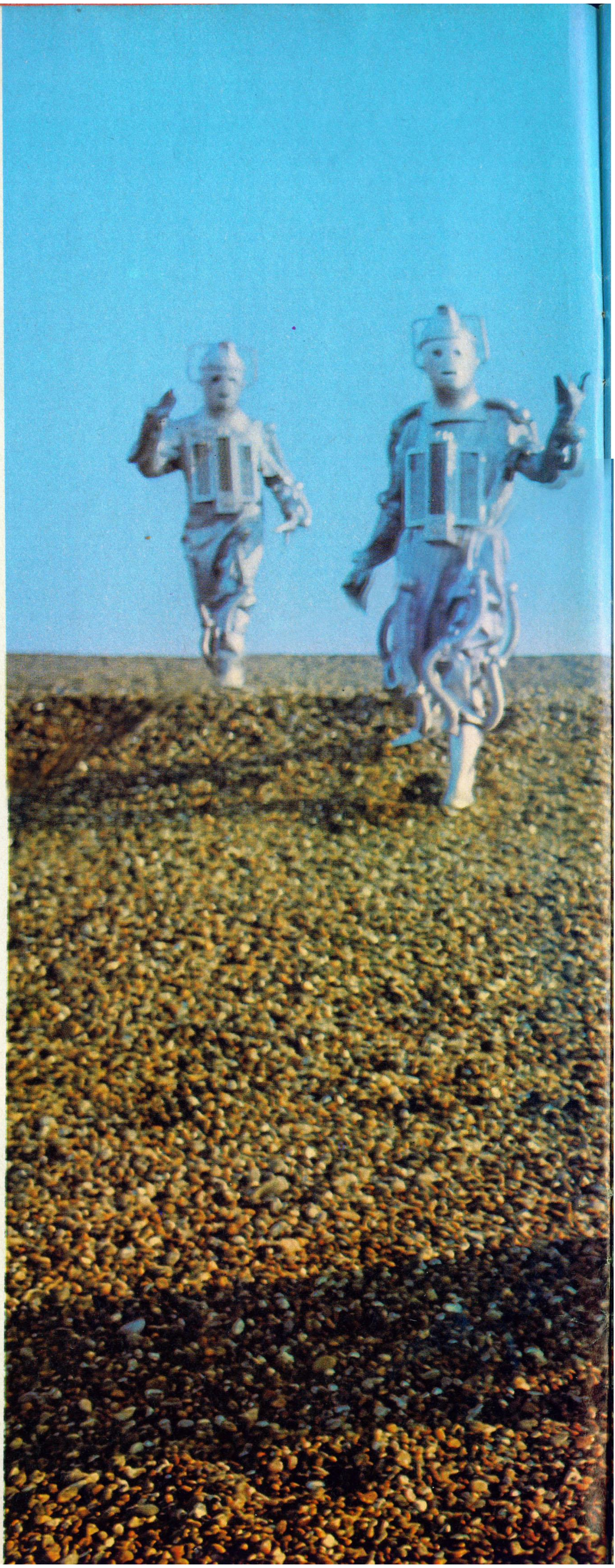
'I started as a boy soprano in musicals like *The King and I*, but I've been doing TV since I was 15,' says **Michael Craze.** 'TV has always been my main source of work, though I'd never done a series before *Dr Who*. There are more problems working in *Dr Who* than in most other TV series. It's tough making your mark when you're continually surrounded by a bunch of scene-stealing monsters! But it's no fun being inside those costumes, either.

'I played Ben, the cockney merchant seaman who came into the series at the same time as Polly. Ben wasn't as arrogant as I'd have liked to have made him, but he was a tough bloke. Anneke and I spent much of the time being chased by Cybermen, who had just been introduced into the series. We also did quite a lot of time-travelling.

'Once I was captured by pirates. They were supposed to make me walk the plank – and I did just that. They suspended me over the edge of the big water tank at Ealing Studios and then the plank was whipped away from under my feet. It was terrifying. The Doctor came to the rescue eventually, but not before I'd got thoroughly soaked.

'My most vivid and long-lasting memory from the series is a personal one. Before I joined *Dr Who* I broke my nose. I had an operation, but my nose was still pretty tender. I got to the studios one day to find they were using shredded polystyrene for special effects.

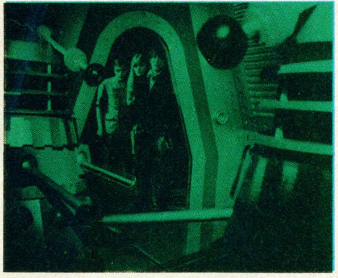
'Suddenly this crazy bird – a personal assistant on the set – picks up handfuls of the stuff and throws it at me like snowballs. The first one hit me on the nose and I reckon I breathed in half of it. I thought the safest thing to do was to take the lady for a coffee. Now I'm married to her!'



1966/7

THE POWER OF THE DALEKS

(6 episodes) **by David Whitaker**



A fully-recovered Dr Who has been rejuvenated and has a totally new appearance and personality. Tardis materialises on the Earth colony Vulcan in 2020. In a space rocket in the Mercury Swamp the Doctor finds two inanimate Daleks. But Lesterson, the Chief Scientist, has removed one, reactivated it and plans to use Daleks as servants. Rebels out to overthrow the colony's Governor decide to use the reactivated Daleks to help them. The Daleks have secretly set up a reproduction plant – on a conveyor-belt system – and plan to 'exterminate all humans.' But the Doctor finds their power source and turns it against them.

THE HIGHLANDERS

(4 episodes) **by Elwyn Jones and Gerry Davis**

Tardis lands on a Scottish moor in 1746 near the battlefield of Culloden, which has just seen the English defeat of the Scots and Bonnie Prince Charlie. The Doctor and his friends come across a group of hunted Highlanders led by clan laird Colin McLaren and accompanied by his daughter Kirsty and faithful piper Jamie. The Highlanders and time-travellers are captured by English Lieutenant Algernon ffinch. At the English camp a crooked solicitor, Grey, is working out a scheme to transport prisoners to slavery in the West Indies. The Doctor escapes and gets arms to the Scottish prisoners, held aboard a stolen ship, the *Annabelle*. Grey and the ship's captain are overpowered and the ship returned to its owner, who takes the Scots to safety in France. The Tardis dematerialises with an extra passenger – Jamie.

THE UNDERWATER MENACE

(4 episodes) **by Geoffrey Orme**

The Tardis lands on an extinct volcanic rock surrounded by sea. On leaving their ship the Doctor and his companions are kidnapped by the primitive Atlanteans and taken below the sea to the city of Atlantis. There its inhabitants plan to sacrifice the travellers to their goddess Amdo, suspending them over a pool of hungry sharks. They are rescued by the scientist Zaroff, who has a plan to destroy the world by draining the ocean into the white hot core of Earth so the super-heated steam will explode it in two. Zaroff takes Dr Who with him, sends Ben and Jamie to the mines and orders that Polly undergo an operation to become a fish worker, collecting food from the sea. The Tardis crew escape and persuade the fish workers to revolt, but Zaroff is unperturbed, for he is confident that within 12 hours the world will be destroyed. He becomes the victim of his own scheme when the Doctor enters the generating plant and accelerates the fission to break down the sea walls. Zaroff is drowned by the flood waters; the others escape.

THE MOONBASE

(4 episodes) **by Kit Pedler**

In the year 2070 Hobson and his deputy Benoit command a Weather Station on the Moon. There they operate the Gravitron, a gravity machine which has control over the weather on Earth. When Dr Who arrives on the Moon – this is his first-recorded visit there – he finds that a mysterious disease has broken out. He investigates, and in the midst of problems, like strange kidnappings and the Gravitron losing co-ordination, discovers that the Cybermen have landed. They are responsible for the disease that has smitten the space station, and the Gravitron's peculiar behaviour. It is all part of a well-planned Cyberman plot to take 'control' of the kidnapped men and force them to operate the Gravitron, enabling the Cybermen to destroy Earth by drastically altering its weather. Polly retaliates by spraying the plastic Cybermen with fire extinguishers filled with solvents, but the main enemy force is approaching. Suddenly the Doctor realises that the Cybermen are susceptible to gravity – that is why they had to have humans working the Gravitron – so by deflecting this machine on to the Moon's surface these monsters and their ships are sent shooting off into the distant limits of outer space.

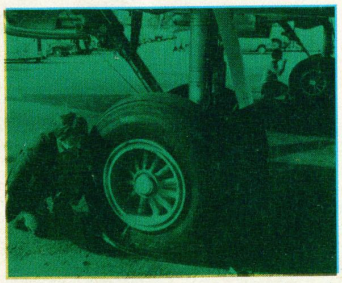
THE MACRA TERROR

(4 episodes) **by Ian Stuart Black**

Dr Who and his friends find themselves in the distant future on a planet run like a gigantic holiday camp. A man called Medok tells the Doctor it is being infiltrated at night by crab-like creatures called Macra. The Macra are in control of this 'paradise' and have conditioned the workers to quarry the deadly gas they survive on. The Doctor takes control of the gas-pumping machine and stops the life flow to the Macra. Ben clinches the victory by blowing up the gas pumps.

THE FACELESS ONES

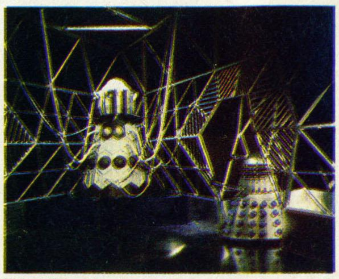
(5 episodes) **by David Ellis and Malcolm Hulke**



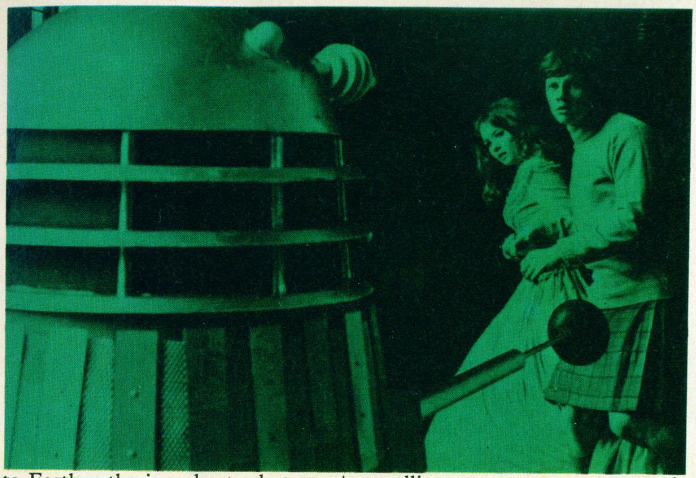
It is Gatwick airport in 1966 and the Tardis materialises on the runway of an incoming jet. While Polly hides in a hanger she is witness to the murder of a policeman. Then Polly and Ben are kidnapped and Dr Who discovers others have disappeared – all passengers on Chameleon Tours charter flights. The kidnappers are the Chameleons, a race from another planet who have lost their identity in a nuclear explosion and are dying out. Their scientists have devised a method for taking over the identity of humans – the transference taking four weeks. The Chameleons have got aboard aircraft and miniaturised 50,000 passengers, presently being held in a space station hundreds of miles above Earth. The Doctor succeeds in freeing them. Ben and Polly remain in the England of 1966.

THE EVIL OF THE DALEKS

(7 episodes) **by David Whitaker**



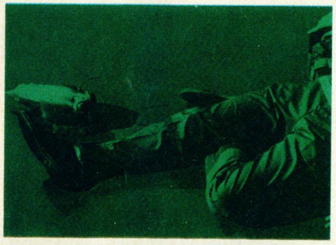
The Tardis is stolen and driven off in a lorry. Dr Who and Jamie follow it and arrive at a Victoriana antique shop owned by the ancient Edward Waterfield. All three are transported back 100 years to the home of scientist Theodore Maxtible. The Daleks are holding Waterfield's daughter Victoria prisoner – it is they who forced her father to travel through time as Maxtible to bring Dr Who back to 1867. They coerce the Doctor to run an experiment on Jamie, registering every emotion he shows while rescuing Victoria. The resulting 'human factors' are injected into three new Daleks, but is disastrous, as the Daleks adopt attitudes of playful friendliness instead of cunning! All are recalled to the Dalek planet of Skaro, where the Emperor Dalek tells the Doctor he is to take the Dalek 'factor' back

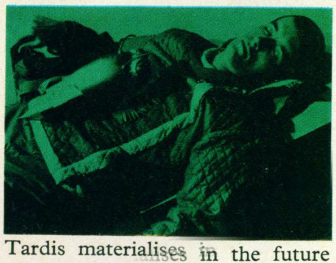


to Earth – the impulse to destroy. Dr Who is passed through a machine transforming humans into mental Daleks, but the Doctor is unaffected, for he is not a human. Instead, he humanises the Daleks.

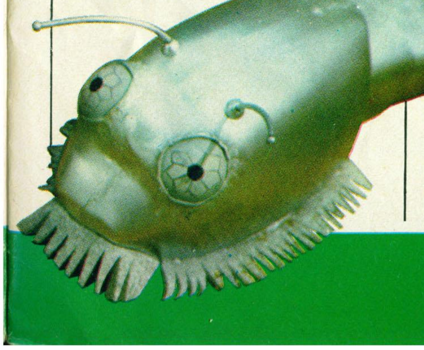
THE TOMB OF THE CYBERMEN

(*4 episodes*) **by Kit Pedler and Gerry Davis**





Tardis materialises in the future on the planet of Telos, where the time-travellers meet an Earth archaeological expedition financed by a strange couple named Kaftan and Klieg. They are evacuating the last remains of the now-extinct Cybermen. But the Cybermen are revived by a raise in temperature engineered by the deranged Klieg. Victoria saves the party from the Tombs, but the Cybermen retaliate by sending Cybermats – small metallic creatures – to attack them. Dr Who neutralises them and freezes the Cybermen to inactivity.



THE ABOMINABLE SNOWMEN

(*6 episodes*) **by Mervyn Haisman and Henry Lincoln**

Explorer Travers is in the Himalayas searching for the Yeti when his companion is killed. Travers accuses Dr Who of his friend's murder. The Yeti are fur-covered Robots, directed by an evil intelligence. But Dr Who overcomes them.

THE ICE WARRIORS

(*6 episodes*) **by Brian Hayles**

It is England during the second Ice Age. Dr Who and his companions seek refuge in a scientific base where the ice barrier is being combated by an ioniser. Embedded in the ice face is a perfectly preserved body of what appears to be a Viking warrior. Varga, the Ice Warrior, is revived at the base, but he captures Victoria. He is in fact a Martian Captain of a spaceship which crash-landed in the ice. He is intent on freeing his craft. Dr Who takes over the base and uses the ioniser at full strength to create an explosion – melting the Martians and halting the ice flow.

THE ENEMY OF THE WORLD

(*6 episodes*) **by David Whitaker**

Arriving on an Australian beach, the time-travellers are attacked by a hovercraft, then rescued by a helicopter girl named Astrid. Her boss, Giles Kent, explains that Dr Who is the double of a would-be world dictator, Salamander. Jamie and Victoria infiltrate Salamander's retinue and discover he is the instigator of the 'natural' disasters sweeping the world. But Jamie and Victoria are captured, and to organise their rescue Dr Who impersonates Salamander. He penetrates Salamander's office and is confronted by Kent, who is planning to seize Salamander's power. Salamander impersonates the Doctor and tries to steal the Tardis. He's ejected into space.

I'M ALWAYS READY TO SWASH MY BUCKLE

'Apart from the three Doctors, I suppose I was one of the longest-serving members of *Dr Who,*' says **Frazer Hines.** 'For three years Pat, Deborah Watling and later Wendy Padbury and I had an absolute ball together. I think there's always room for fun when you're working – except, maybe, if it's Chekhov or Shakespeare – and I've always been a practical joker.

'We had plenty of opportunities for practical jokes with the girls. We loved our women, Patrick and I. I gather Debbie and Wendy have already recalled some of our jokes in their interviews, but I'll never forget when I was supposed to get Debbie out of a trance someone had put her in. I had to drop a small stool behind her to see if it would make her flinch. She was supposed to remain unmoved. At the last rehearsal another actor and I lifted up this huge wooden trunk behind her, full of bits of metal and props, and slammed it down. The noise was incredible. I thought Debbie would never come off the ceiling.

'I'm not really a science fiction man. I didn't even watch the Moon landings. But then, as I told people, I'd already been there – in *Dr Who*. I always like costume parts where I can use an accent, so Jamie was just right for me. He was a refugee from the Battle of Culloden and was originally only booked for four episodes. But the response was so good that they asked me to stay. And he got plenty of action which, again, suited me, because I'm always ready to swash my buckle.

'Originally Jamie had a real Highlands accent, but I eventually mellowed it to a sort of "TV Scots." I don't have an accent myself, though my mother is a Scot. People thought Jamie's accent came easily because of that yet, strangely, I can't hear my mother's accent at all, though people say it's very broad.

'Wearing a kilt could be a bit chilly at times, but the big question people always wanted to know was: Did I or didn't I wear anything under it? Well, I'll tell you: I did – usually football shorts, so I could get a game of soccer as soon as I'd finished on the set. But I always tried to keep it a secret and had it written into my contract that they had to watch their camera angles!

'Once I had to climb up a rope ladder to a helicopter in a roaring wind. The crew thought: "Ah, we've got him now." But I'd read that morning that the Queen had lead weights sewn into her dresses so they wouldn't blow up. So I went off to the costume department and had a load of weight sewn up my kilt. By the time I got up the ladder it was hanging round me like a safety curtain. The crew just couldn't believe their eyes!'

ESCAPE FROM THE YETIS-TO BE CONFRONTED BY MY DAD!

'I was first seen in *Dr Who* screaming at the Daleks, and I think I continued screaming for the next year,' says **Deborah Watling.** 'I screamed myself hoarse at every monster that came in sight, which was rather wearing but quite fun, because I'm not the timid type at all. Victoria became sort of the Doctor's adopted daughter after her father was killed by the Daleks, so I was always well looked after.

'Patrick, Frazer and I certainly had some fun. We filmed *The Abominable Snowmen* adventure in the Welsh mountains and that *would* have been fun – except it was so cold. Much of the time there was a blizzard raging and about the only people who kept warm were the Yeti, all snug and wrapped-up in their furry costumes. Poor Frazer in his kilt. Even his knees went blue!

'My father, Jack Watling, was also in that episode. I'd never acted with him before and it proved hysterical. At one point Frazer and I were meant to be running downhill away from the Yeti when my dad, playing a professor, met us.

'Frazer and I charged down the mountainside to be confronted by this incredible figure with a grey beard and white hair. I couldn't believe it was Dad and just stood there until the three of us collapsed in giggles. They had to do the scene again.

'They're great ones for practical jokes in *Dr Who*. Once Pat, Frazer and I had to wade through foam which had been supposedly left on a beach by seaweed monsters. Suddenly the two of them picked me up and ducked me right in it. As I came spluttering up for air the director yelled: "Cut!" and then said: "Yes, I like that. But we'll take it again because somebody laughed." It wasn't me!'

1968/9

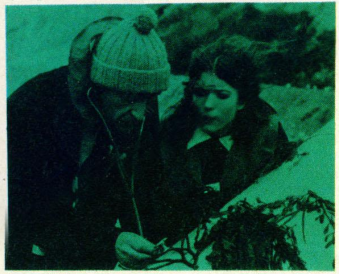
THE WEB OF FEAR

(6 episodes) **by Mervyn Haisman and Henry Lincoln**

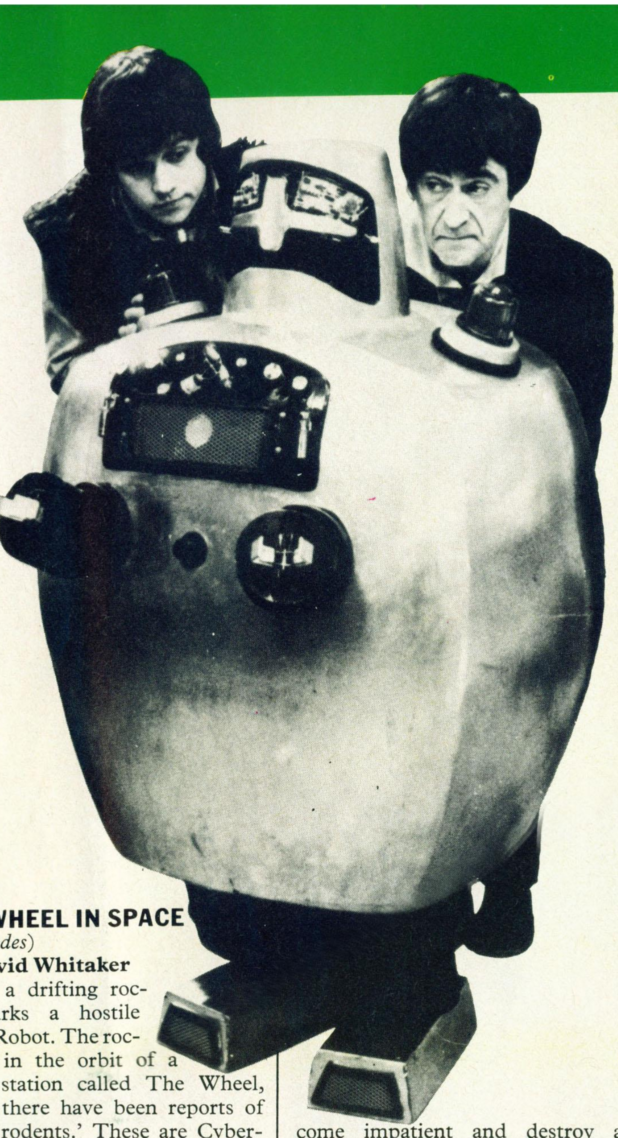
In mid-space, a cobweb-type substance envelopes the Tardis and the time-travellers find themselves on a deserted London Underground station. They meet an old friend, Professor Travers (from *The Abominable Snowmen*, 1966/67) who confesses he has constructed and reactivated a Yeti. This in its turn has brought the return of the Intelligence. Yeti are at large in the Underground; the Doctor is captured and a brain-draining helmet placed on his head. But he manages to drain the brain from the Intelligence – until he is rescued by well-meaning friends, leaving the Intelligence free again.

FURY FROM THE DEEP

(6 episodes) **by Victor Pemberton**



Dr Who and his companions are suspected of sabotage at a North Sea gas refinery off the east coast of England. The refinery boss, Robson, blames them for the disappearance of rig crews,and leaks and pressure build-ups in the pipelines. The Doctor reports strange 'heartbeats' from the pipelines, but Robson refuses to halt the gas flow. The noises come from a form of parasitic seaweed, which absorbs human brains and transforms men into weed creatures. The weed launches an attack on the refinery, but after Victoria's screaming kills one the Doctor discovers that the creatures can be destroyed by high-frequency sound waves. Victoria decides to remain at the refinery.



THE WHEEL IN SPACE

(6 episodes)

by David Whitaker

Inside a drifting rocket lurks a hostile Servo Robot. The rocket is in the orbit of a space station called The Wheel, where there have been reports of 'space rodents.' These are Cybermen, planning an Earth invasion. Dr Who annihilates the Cybermen's invasion fleet and travels on with Jamie and a new companion, Zoe.

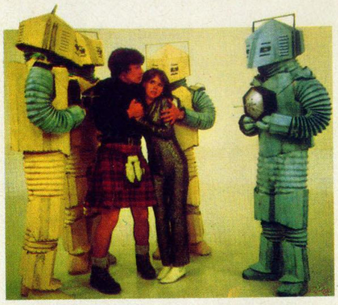
THE DOMINATORS

(5 episodes) **by Norman Ashby**

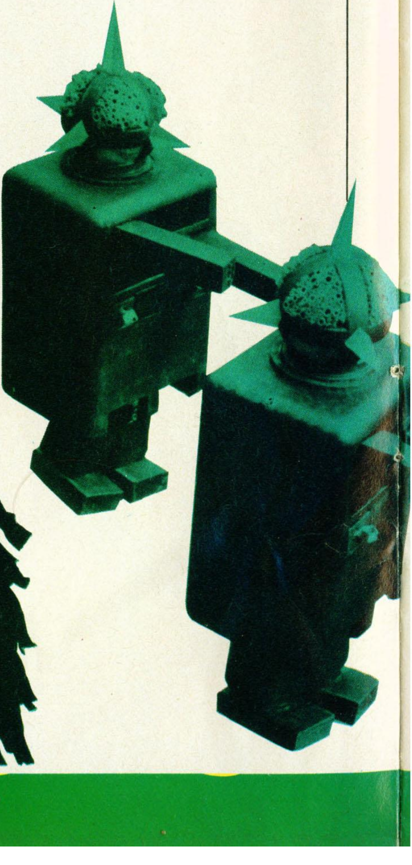
Tardis materialises on the planet of Dulkis, now taken over by the alien Dominators and their robot servants the Quarks. The Dulcians are pacifists and cannot retaliate. They ignore the Doctor's warnings and some of them are captured. Dr Who discovers the Dominators' plan: to fire rockets down bore holes, causing an eruption of the molten core of the planet. They will then drop an atomic seed capsule down a bore-hole, turning Dulkis into a radioactive mass, fuel for the Dominator space fleet. Jamie and Cully, rebellious son of the Dulcian leader, become impatient and destroy a Quark, and the Doctor and Zoe are captured by Dominators. The Doctor intercepts the seed capsule as it is dropped, and conceals it in the Dominator ship, destroying it in an atomic blast.

THE MIND ROBBER

(5 episodes) **by Peter Ling**

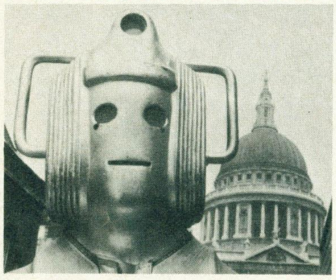


The Tardis arrives in the Land of Fiction, a huge white void where fiction appears as reality. The travellers are hunted by White Robots and encounter mechanical soldiers. Jamie gains entry to the Citadel of the Master, an aged gentleman who wants to retire from rule and insists the Doctor takes his place. The Doctor refuses, so the White Robots capture Jamie and Zoe. In the following battle of wits Dr Who calls up champions from fiction to defeat the Master, and the time-travellers escape.

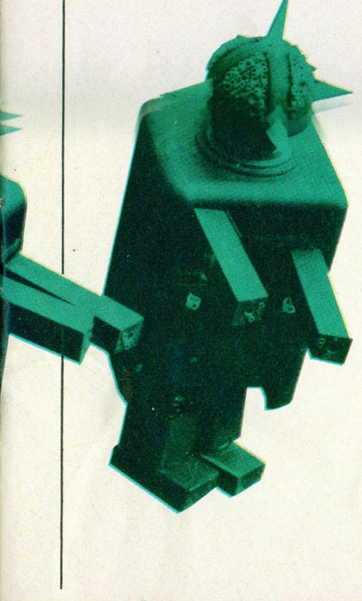


THE INVASION

(*8 episodes*) **by Derrick Sherwin**



Dr Who calls at the home of his friend Professor Travers, but finds he has let it to a computer scientist, Professor Watkins and his niece Isobel. Watkins has disappeared – last heard of at International Electromatics, a firm controlling all the world's computers. Dr Who visits the firm and distrusts its managing director, Tobias Vaughn. So does Brigadier Lethbridge-Stewart of UNIT (United Nations Intelligence Taskforce). Zoe and Isobel are captured by Vaughn, forcing Watkins to develop the Cerebration Mentor. The Doctor discovers Vaughn is in the power of the Cybermen, who launch an invasion through the sewers and paralyse Earth's population. A reformed Vaughn helps Dr Who destroy the Cybermen's spaceship.



THE KROTONS

(*4 episodes*) **by Robert Holmes**

The primitive Gonds are ruled and taught through the Machine of the Krotons. The Krotons are monsters waiting in suspended animation until they have drained enough mental energy from the Gonds' brains to be reanimated. Each year the two most brilliant Gonds are lured into the Kroton Machine. Zoe and the Doctor take the Teaching Machine Test and their mental power reanimates the Krotons. The Doctor discovers the Kroton life system is based on telurium. He destroys them with acid.

THE SEEDS OF DEATH

(*6 episodes*) **by Brian Hayles**

Earth in the 21st-century enjoys the T-Mat, a form of instantaneous travel directed from a Moon relay station. The machine breaks and Dr Who investigates. He finds the Moon overrun by Ice Warriors, who are preparing to launch an invasion against Earth. To weaken Earth's resistance they are using the T-Mat to send Martian Seed Pods, emitting a lethal fungus, over Earth's winter zones. The Doctor manages to get himself and the T-Mat back to a now-chaotic Earth, where Ice Warriors have taken over control of the weather. The only things that can combat the fungus are water and warmth. Dr Who destroys it with torrential rain.

THE SPACE PIRATES

(*6 episodes*) **by Robert Holmes**

The Tardis materialises on a navigation beacon far out in space. One of these has been stolen and the International Space Corps is convinced the thief is an innocent yet eccentric space mining pioneer named Milo Clancey. Milo joins forces with Dr Who, and the Tardis crew hide him on the planet of Ta. Here dwells Caven, a notorious space criminal in league with space pirates. Caven is assisted by Madeleine, daughter of his ex-partner, Dom Issigri – who is Caven's captive. Madeleine sees the error of her ways.

THE WAR GAMES

(*10 episodes*) **by Terrance Dicks and Malcolm Hulke**

The Tardis materialises in no man's land on a First World War battlefront in France. The crew escape and when they emerge from a cloud of mist find themselves on another planet. It is split into zones and in each a fierce war is being waged. The wars are controlled by the Aliens, who have gathered soldiers from many periods of history, brainwashed them and put them to battle. The aim: to form an invincible army from the survivors and take over the Galaxy. Dr Who seizes the Alien HQ and calls on the Time Lords for help. His masters capture him, find him guilty of stealing the Tardis and exile him to Earth.

I GAVE THE COMPUTER A BREAKDOWN

'I've always been cast as a schoolgirl,' says **Wendy Padbury.** 'I'm 25 now but I'm small and look young, so I'm still cast as a schoolgirl! But Zoe, the girl I played in *Dr Who,* was supposed to be ageless even if she did look young. She was originally intended to be a computerised type of lady without many human emotions. At the start she was different from the other girls the Doctor had been involved with – a bit more in control, I suppose. But it didn't take long for her to become a jibbering wreck, screaming in the corner like everybody else.

'She did maintain her super-intelligence. There was one marvellous scene where she had to do mental battle with a computer. In the end the poor machine got so confused by her interrogation it had a nervous breakdown.

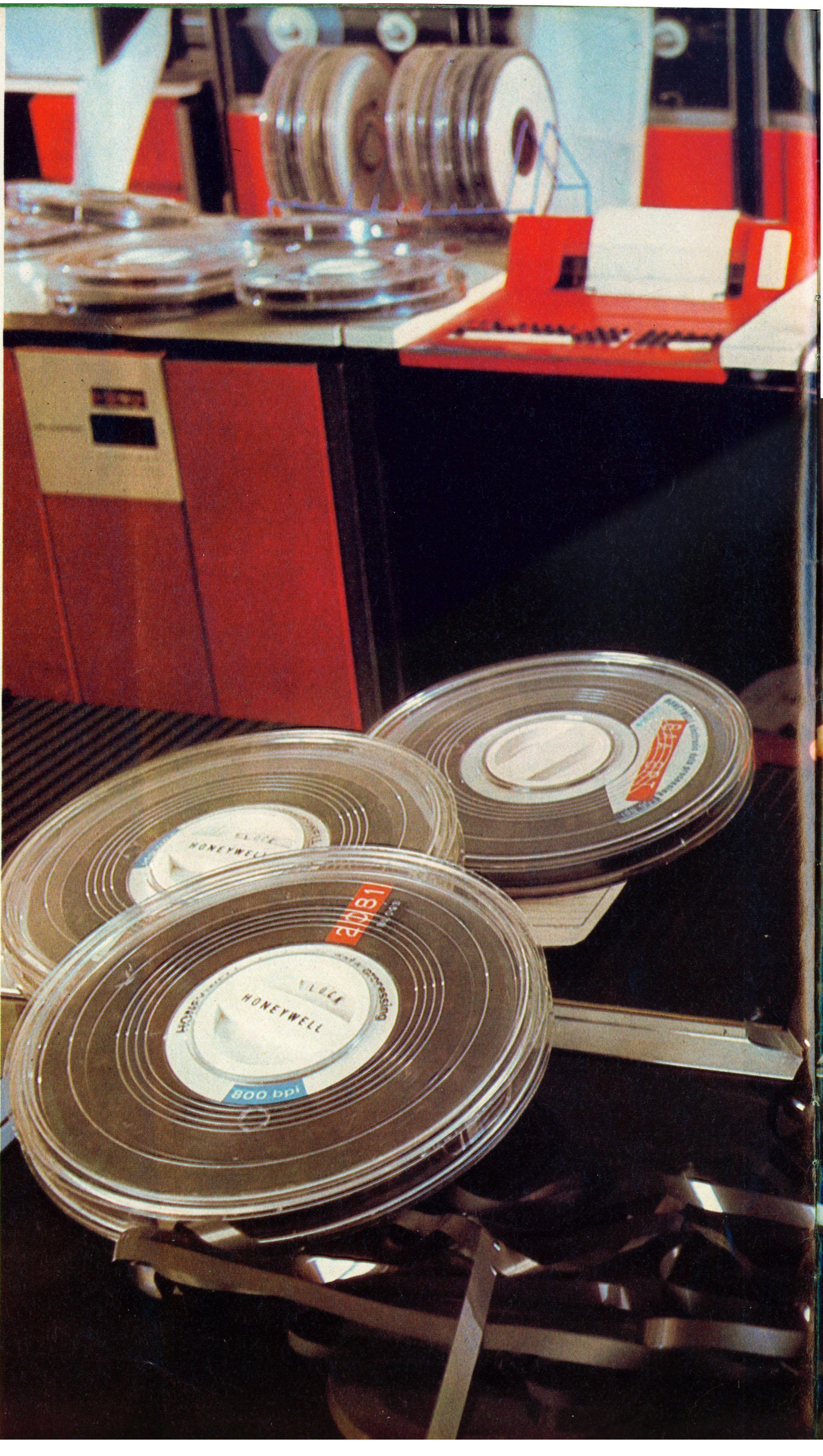
'The outdoor location I remember most vividly was at Brighton for *War Games.* We all thought we were set for a few peaceful days by the seaside, but ended up filming on Brighton rubbish tip in the freezing cold with rats as unwelcome extras. Ugh! And I'll never forget doing a scene on Hampstead Heath for *The Seeds of Death.* At one point some Ice Warriors came up over a dip. A poor lady driving by glanced towards the Heath, saw the monsters and steered straight into the kerb!

'It was super to work with Pat Troughton and Frazer Hines all that time. Patrick had been my favourite actor since I was a child. My mother and I were absolutely potty about him. He's got such a fantastic face. The three of us all left together. What a sad day.

'Once, at rehearsals, Frazer and I debagged Patrick in the Tardis and sent him out trouserless! But he got his revenge. We were rehearsing in a church hall one day and I'd fallen asleep during the lunch break.

'I was wearing one of those wrap-around kilts that tie with one buckle. While I was asleep Frazer had undone the buckle and then he and Pat shouted: "Rehearsals, Wendy!" I sprang up, the kilt fell down and I ran screaming into the corridor only to bump straight into the vicar.

'Pat and Frazer insist that I mumbled: "Good afternoon, Vicar" and curtseyed. I don't remember. At least, I try not to.'



1970/1

SPEARHEAD FROM SPACE

(4 episodes) **by Robert Holmes**

Fifty meteorites fall, and the Brigadier and his newly-recruited scientist Liz Shaw, from Cambridge, enlist the aid of a physically-changed Dr Who. Factory boss Channing is a Nestene – they colonise planets by assuming life forms – and is making plastic facsimiles of the Cabinet to gain world domination. Dr Who triumphs and agrees to work for UNIT in return for tools to repair his Tardis. The Brigadier gives him a sprightly yellow roadster, Bessie.

DR WHO AND THE SILURIANS

(7 episodes) **by Malcolm Hulke**

On Wenley Moor, a secret Derbyshire atomic research centre where a reactor converting nuclear energy to electrical power is being developed, work is being held up by inexplicable power losses and breakdowns amongst staff. Dr Who traces the trouble to underground caves where prehistoric monsters live with a nest of highly-intelligent man-like reptiles, the Silurians. They went into hibernation millions of years ago, but have been resuscitated by accidental electrical discharges from the research centre and now claim back 'their' Earth. The Doctor strives for harmony between Man and Silurian, and at first seems to succeed with the Old Silurian. But then the rebellious and intolerant Young Silurian releases a terrible disease that will wipe out man. The Doctor finds an antidote. The Silurians take over the centre and plan to destroy the Van Allen Belt, which shields Earth from the sun. The reptiles are tricked into returning to their caves by threat of radiation and the Brigadier – to Dr Who's disgust – blows them up.

THE AMBASSADORS OF DEATH

(7 episodes)

by David Whitaker

Seven months after leaving Mars, the 'Probe Seven' ship has still not returned to Earth, and a 'Recovery Seven' rocket is dispatched to investigate. Contact is made, but the sound Space Control Centre receives is a scrambled signal, which is replied to from an abandoned London warehouse. 'Recovery Seven' returns to Earth, but after landing the astronauts are kidnapped by men masquerading as UNIT forces. Then Liz Shaw notices the ship's Geiger counter is at maximum, which would have killed the crew by radiation. Dr Who is convinced they are not human. He makes a solo space mission and finds the real astronauts held aboard a large alien spaceship.

INFERNO

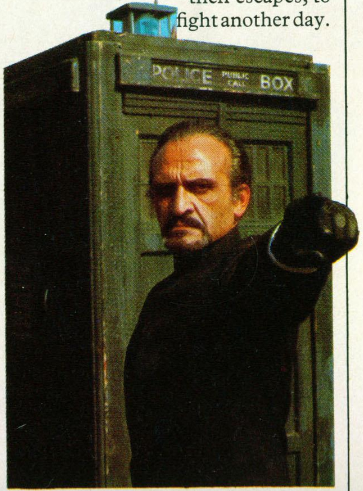
(7 episodes) **by Don Houghton**

Crisis at a top secret drilling project – Inferno – which aims to penetrate the Earth's crust and release a new energy source to be called Stahlman's Gas. The drilling pipes are leaking a liquid which turns green on contact with the skin and transforms its victims into Primords – vicious primeval apes. Dr Who transports himself into the future where Inferno is about to destroy the planet, and manages to thwart the power-crazed Professor Stahlman, who has now become a full Primord.

TERROR OF THE AUTONS

(4 episodes) **by Robert Holmes**

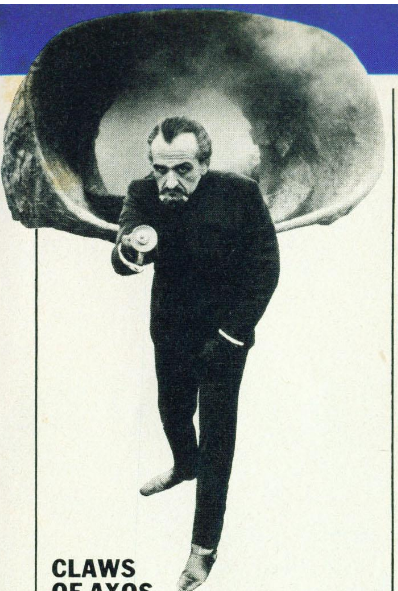
Introducing the Master, who materialises in a horsebox at Rossini's Circus. Another Time Lord warns Dr Who and his new assistant Jo Grant, who realise that with the Master's help the Nestenes are planning a new invasion using the Autons. In a battle between Autons and UNIT forces the Master, to save his own life, helps the Doctor –then escapes, to fight another day.



THE MIND OF EVIL

(6 episodes) **by Don Houghton**

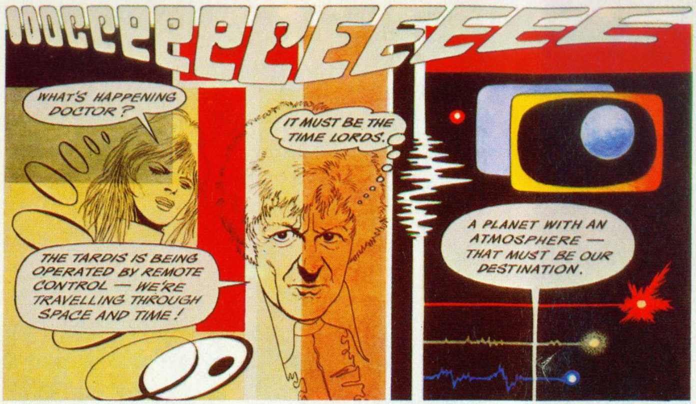
Dr Who suspects an alien mind parasite in the Keller machine, which extracts evil from criminals' minds; in London the Chinese delegate dies at the World Peace Conference; and at sea a UNIT officer is dumping a banned Thunderbolt nerve gas missile. Professor Keller is the Master, who captures the Doctor and Jo by inciting a riot at Stangmoor Prison. He incites the convicts to hi-jack the nerve gas missile to destroy the peace conference. The Doctor physically pins down the Master, using the now-mobile mind parasite, then explodes it with the nerve gas.



CLAWS OF AXOS

(4 episodes) **by Dave Martin and Bob Baker**

An alien spaceship contains the Axons: humanoid, friendly, beautiful. They ask for hospitality on Earth to regenerate, as their planet has been crippled by a solar flare. A suspicious Dr Who discovers the Axons, their ship and a material called Axonite are all part of a parasite brought by the Master to absorb all living energy on Earth. The Doctor forces Axos into a 'time loop,' destroying the Axons, whose 'parent body' has vanished.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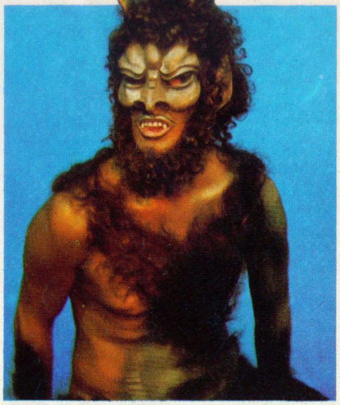
IT MUST BE THE TIME LORDS.
THE TARDIS IS BEING OPERATED BY REMOTE CONTROL — WE'RE TRAVELLING THROUGH SPACE AND TIME !
A PLANET WITH AN ATMOSPHERE — THAT MUST BE OUR DESTINATION.

COLONY IN SPACE

(6 episodes) **by Malcolm Hulke**

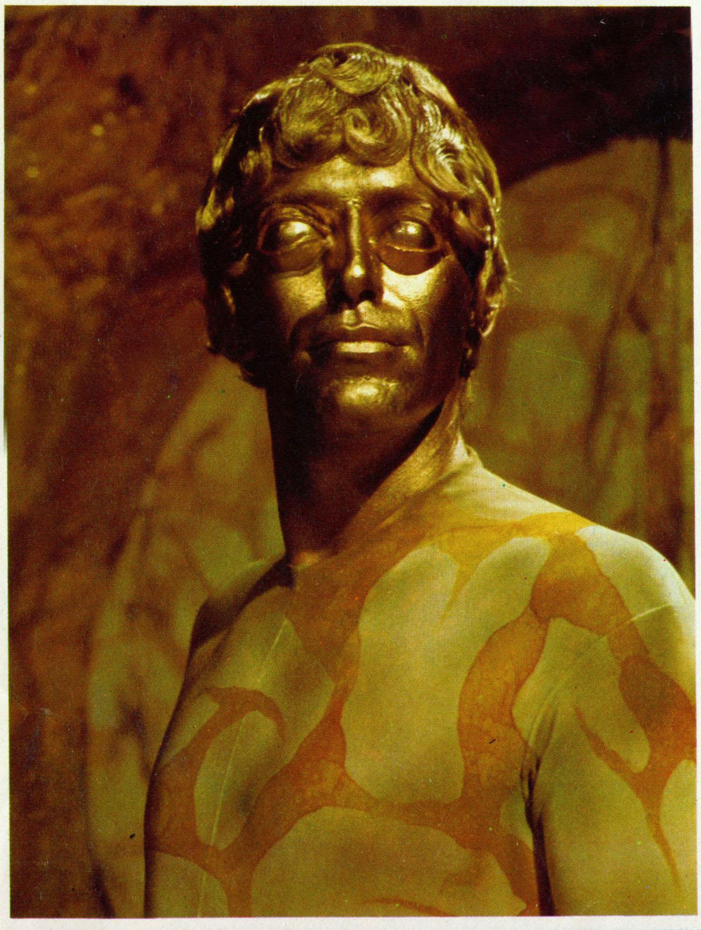
The Time Lords permit the Tardis to make its first voyage through time and space for more than a year. For the Master has stolen the Doomsday Machine file, and it must be retrieved. The Time Lords dispatch Dr Who and Jo to a bleak Earth-type planet in the year 2471, where they meet the Colonists, farmers who left Earth because of overcrowding. Since their arrival they have faced inexplicable crop failures. There are two other groups on the planet: the Primitives, its original savage inhabitants, who steal the Tardis and imprison Jo in their underground city, and Earthmen from the Interplanetary Mining Corporation, who have come to exploit the rich mineral deposits. If successful, they would make the planet uninhabitable. The IMC have been demoralising the Colonists with attacks by robot lizards. An adjudicator from Earth, brought in to judge between the relative merits of mining and farming, is none other than the Master, whose aim is to regain the stolen Doomsday Machine from a nearby runied city, where it is maintained by non-human alien priests. The Doctor and Jo struggle to prevent the exile of the Colonists and to stop the Master from seizing the Machine. The Guardian, sole survivor of the race that built the Machine, helps the Doctor set it to self destruct.

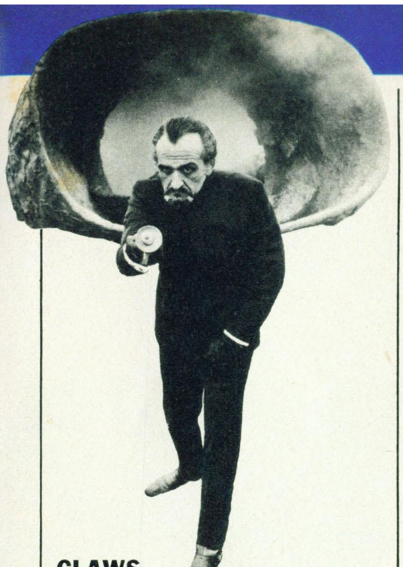


THE DAEMONS

(5 episodes) **by Guy Leopold**

Against the advice of a local white witch, a prehistoric barrow at Devil's End is cut open. A mysterious force erupts, killing the evacuation professor and concussing the Doctor. When he recovers he finds the village cut off by a heat barrier. The Master – posing as the new vicar – has used psionic science to release the power of a Daemon named Azal. Azal offers his power to Dr Who. The Doctor declines, and is about to be destroyed for his rejection when Jo presents herself as a substitute. Azal is so confused by such irrationality that he kills himself. The Brigadier finally annihilates the heat barrier.





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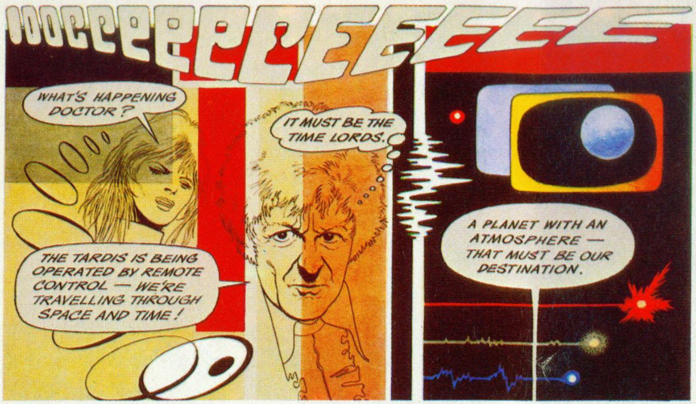
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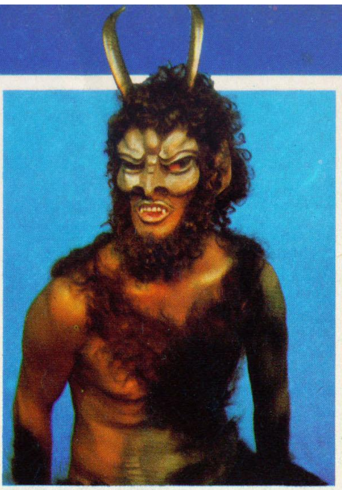

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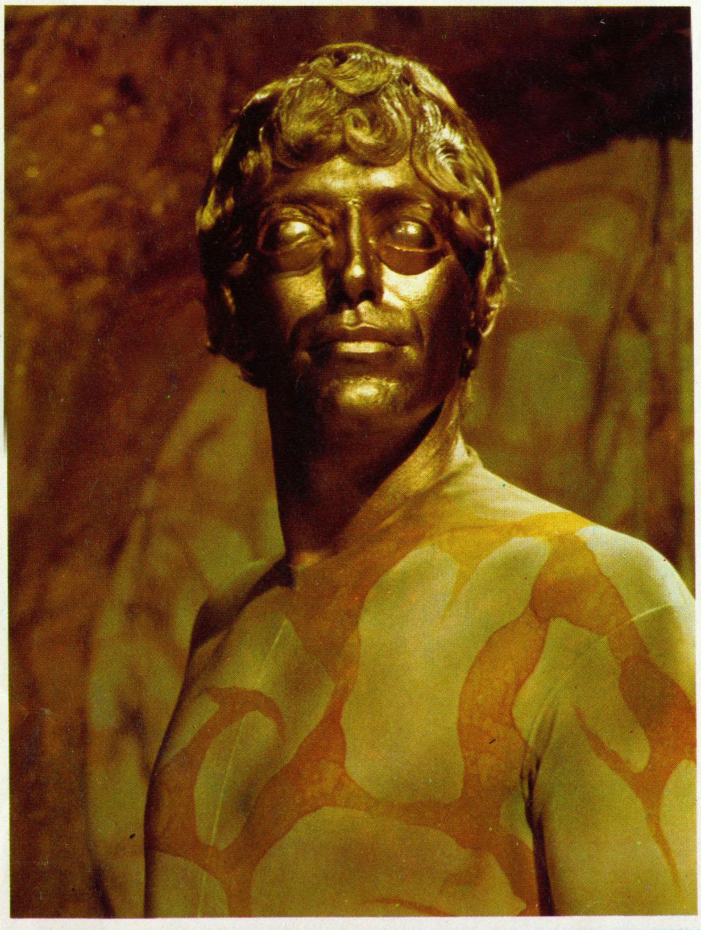


I DROVE BESSIE WITHOUT PASSING MY DRIVING TEST

‘Playing Liz Shaw, the scientist in *Dr Who*, was my attempt to prove I wasn’t just a long-skirted wench,’ says **Caroline John.** ‘Until then I’d done nearly all classical theatre – with the National Theatre Company and reps around the country. So in an effort to change my image I had a picture taken in a bikini (rather pin-uppy, really, and not me at all) and then I got the part in *Dr Who*.

‘It was a super chance. *Dr Who* is a fabulous TV training-ground, because there are so many different facets to the programme. It’s technically exacting and it gave me nine months to a year of solid TV and that’s a rare opportunity for a TV-beginner.

‘Liz Shaw was a mini-skirted lady, at least. With a first-class brain, mind you. I bought an encyclopaedia especially to look up half the things she was talking about. I joined at the same time as Jon Pertwee, which was lovely because the programme was getting a new sense of purpose and being taken rather more seriously. Jon and I started together in the same series, *Spearhead in Space*.

‘I’m not a science fiction person, but I am very gullible. I used to believe most of the programmes myself. Before I joined I didn’t realise there were poor men sweating inside the Daleks. I thought they were remote-controlled. But I did take *Dr Who* seriously. I couldn’t even bring myself to fire a gun in one episode. I squeezed the trigger and somebody else made the bang. But then I hate having anything that can kill in my hand.

‘In *Spearhead in Space* we had to film in Madame Tussauds. That was spooky. In the story some of the waxworks were supposed to come to life, controlled by the Nestenes. I was standing around waiting for my cue when I looked at one of the waxworks – and it blinked. I nearly died. I didn’t realise it was another actor waiting for his cue.

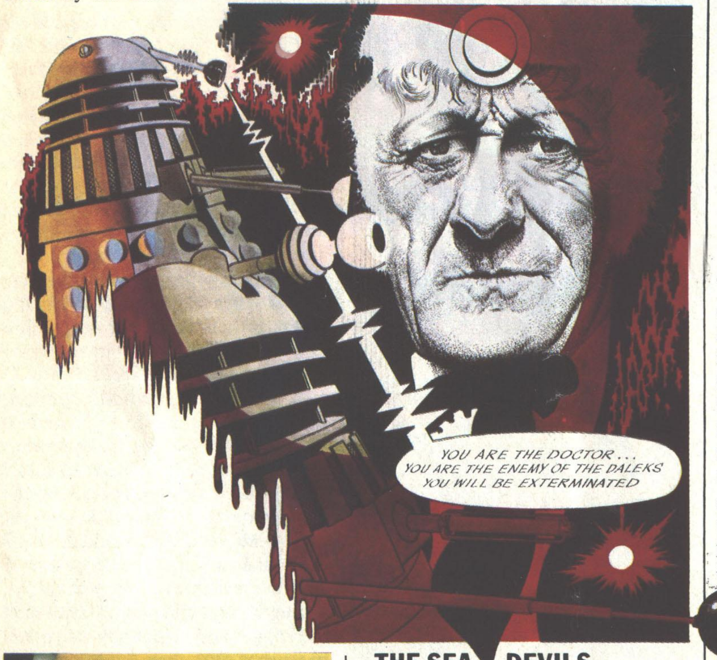
‘One of the nicest things was driving Bessie, Dr Who’s lovely old car. The only trouble was I haven’t passed my driving test. When I drove we had to use a disused airfield and the director, cameraman and lighting-man all piled in the back. I think they were very relieved when I stopped!’

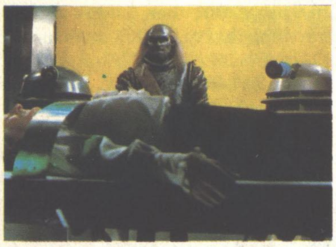
1972/3

THE DAY OF THE DALEKS

(4 episodes) **by Louis Marks**

The peace diplomat Sir Reginald Styles is attacked by guerrillas, who escape to their world of 22 AD, taking Dr Who with them. They are ruled by the Daleks and their ape-like slaves, the Ogrons. The guerrillas say they are after Styles because in the 20th-century he murdered world leaders, making them vulnerable to Dalek attacks. They want to prevent this. The Doctor realises the murderer was a guerrilla still in Styles' house. He hurries to the present and evacuates the house. The guerilla Shura destroys the Daleks with a Dalakanium bomb.

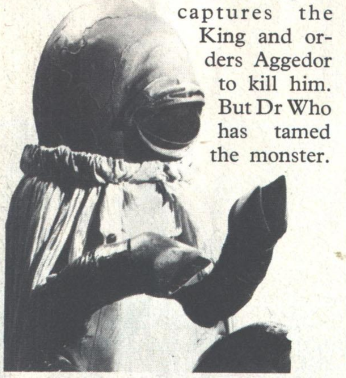




THE CURSE OF PELADON

(4 episodes) **by Brian Hayles**

The primative planet of Peladon has applied for membership of the Galactic Federation. King Peladon and Chancellor Torbis favour the union; High Priest Hepesh does not. Torbis is murdered and Aggedor, a semi-mythical monster, is blamed. Dr Who arrives and is taken for the Earth's delegate. Hepesh captures the King and orders Aggedor to kill him. But Dr Who has tamed the monster.



THE SEA DEVILS

(6 episodes) **by Malcolm Hulke**

Dr Who and Jo visit the Master, in exile on a small island. The Governor, Colonel Trenchard, tells them that ships have been mysteriously disappearing. They investigate and the Doctor is attacked by an underwater Silurian, a man-like lizard known as a Sea Devil. The Doctor discovers that the Master, assisted by a hypnotised Trenchard, is stealing electrical equipment from a naval base to build a machine that will control the Sea Devils – and then conquer the world. The Doctor enters the Sea Devils' base and tries to encourage peace. But his efforts are frustrated by a depth charge attack ordered by a ruthless politician, Walker. Dr Who persuades Walker to allow him a final attempt at peace, but in the meantime the Sea Devils capture the naval base. The evil Master then forces the Doctor to help finish his machine, which will revive Sea Devil colonies all over the world. The Sea Devils' scheme is to kill the Master, whose use to them would be over. But the Doctor sabotages the machine and escapes with the Master – to see the monsters blow themselves up.

THE MUTANTS

(6 episodes) **by Bob Baker and Dave Martin**

The planet Solos is to become independent, to the chagrin of its Marshal. He commissions a Solonian to murder the Earth administrator, and plans to oxygenise the Solonian atmosphere. Ky, a Solonian, is unjustly accused of the murder. On Solos Dr Who meets Sondergaard, who is searching for a cure for the mutating disease threatening the Solonians. Dr Who is forced to perfect the Marshal's oxygenising machine, but Sondergaard injects Ky with his vaccine – and Ky kills the Marshal.

THE TIME MONSTER

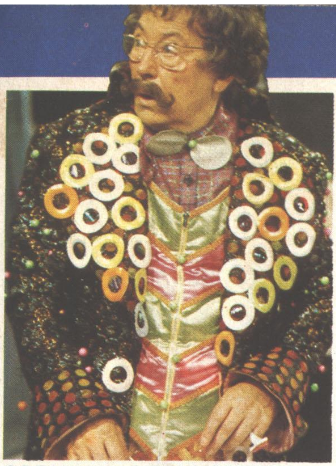
(6 episodes) **by Robert Sloman**

Professor Thascales (the Master) is working on TOMTIT – Transmission of Matter Through Interstitial Time. The Doctor discovers he aims to go through time to Atlantis and steal the Crystal of Kronos. Dr Who tries to foil him, but the Master evokes the fury of Kronos and Atlantis is destroyed.

THE THREE DOCTORS

(4 episodes) **by Bob Baker and Dave Martin**

The energy of the Time Lords is being drained by a mysterious 'black hole' in space. And a cosmic ray research balloon brings back a blob of animated grey gell which dematerialises people on contact. It expands and besieges Dr Who and Jo in the Tardis. The only way the Time Lords can help is by sending the Doctor's previous selves . . . The brains of the three Doctors discover the incidents are caused by Omega, a bitter Time Lord trapped in a universe of anti-matter for thousands of years. The three doctors cross the time bridge and rematerialise in Omega's world of anti-matter. They destroy Omega by making him a supernova and the three Doctors return to their rightful places in time and space.



CARNIVAL OF MONSTERS

(*4 episodes*) **by Robert Holmes**

The Tardis lands on a cargo ship crossing the Indian Ocean in 1926. Or does it? Dr Who and Jo discover that not only are they on an alien planet trapped in a time loop, but they are captives of bespectacled Vorg, his assistant Shirna and their Scope – a miniaturised peepshow of Galaxy life forms. Dr Who tries to escape by entering another section of the Scope – a swamp – where he is confronted by the Drashigs, huge underwater dragons. Finally the Doctor breaks out of the Scope and materialises to full size. He becomes involved in the intrigues of two natives, Kalik and Orum, who plan to overthrow their superior, Pletrac, by allowing the Drashigs to escape. Vorg destroys the Drashigs and the Doctor breaks the time link by contriving to link the Tardis to the Scope – returning the unwilling peepshow participants to their rightful Galaxy times and places.

FRONTIER IN SPACE

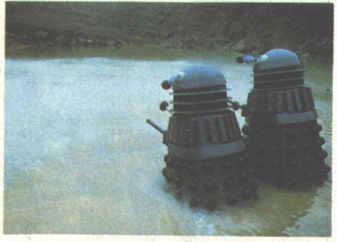
(*6 episodes*) **by Malcolm Hulke**

To avoid a head-on collision in space the Doctor and Jo materialise in the hold of a 25th-century Earth spaceship. Almost immediately the rocket is attacked. They emerge from the hold and the crew see them as their assailants, the Draconians – an alien humanoid race rivalling Earth for control of the Galaxy. Dr Who and Jo, however, see the attackers as Ogrons. A rescue ship takes them all to Earth, where the Doctor is accused of being a Draconian spy. He is then captured by the Draconians and branded as an agent-provocateur in the pay of Earth. The Doctor realises there is a third party using the Ogrons to provoke war. After adventures in deep space, the moon and the bleak and terrifying Ogron planet, the Master emerges as being behind a Dalek-backed plot. The Doctor wins the day, but the Daleks escape him.

PLANET OF THE DALEKS

(*6 episodes*) **by Terry Nation**

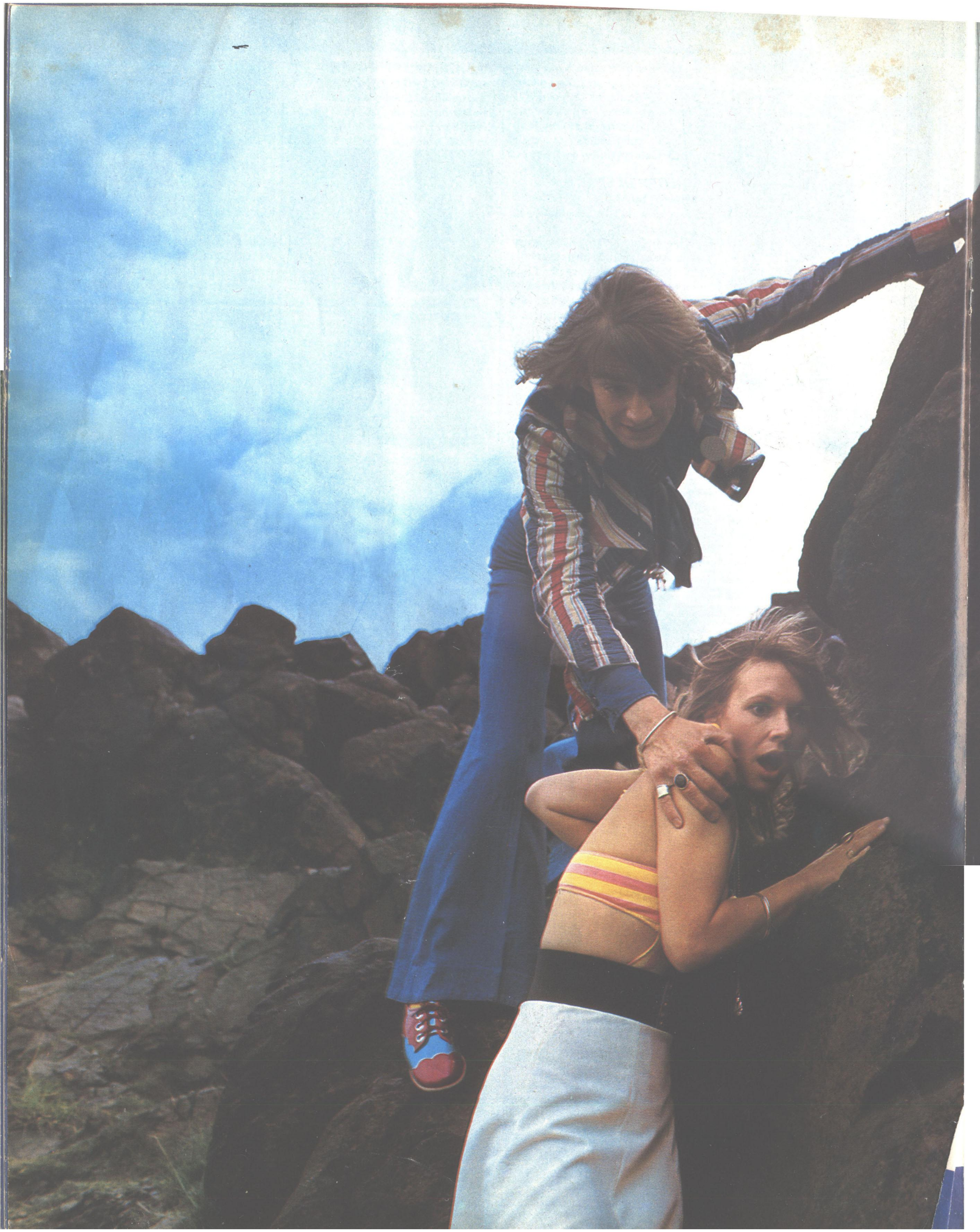
In pursuit of the Daleks, Dr Who lands the Tardis on the planet Spiridon. He falls gravely ill, so Jo sets off for help. She meets old allies, the Thals, who are on a suicide mission to destroy the Daleks. Jo contracts a fungus disease. Survivors of a crashed Thal space vessel tell the recovered Doctor that there are 12,000 Daleks on the planet, immobilised by cold. The Thals activate a bomb releasing an ice volcano, which in its turn refreezes the Daleks for centuries.



THE GREEN DEATH

(*6 episodes*) **by Robert Sloman**

The villagers of Llanfairfach in Wales are delighted when the local Global Chemicals firm gets a Government grant to build a full-scale refinery. But the project is fiercely opposed by ecologist Professor Clifford Jones. He has set up a commune in the valley and feels the refinery is a threat to his paradise – or 'Nuthutch', as locals call it. A strange death in some disused mines brings UNIT to the scene. Dr Who discovers a swarm of giant green maggots and green slime – both fatal to touch – which have been caused by waste pumped from the refinery. The refinery's director refuses to discuss this with the Doctor. He has been taken over by Boss, the giant computer which has a will of its own and is obsessed with the success of Global — at any cost whatever.



THE NUTCASE PROFESSOR SWEPT ME OFF MY FEET

'You can't really separate me from Jo Grant,' says **Katy Manning.** 'As I grew up, so did Jo. When I started I was a right little teeny-bopper, even if I was 21. Five feet tall with a mini-skirt tiny enough to match my height and rings on every finger. Even the Doctor was once heard to say: "Get that bloody little midget out of my hair!"

'I suppose Jo ended up pretty much as she started – short-sighted and screaming. Still a freak, only a more sophisticated freak. I kept my rings on all through – 14 of them, including a great big silver lion ring which Jon gave me because I stopped biting my nails.

'I first met Jon in the foyer of the TV Centre months before I started *Dr Who* and he thought I was a bit of all right. When I went for an audition I was just one of a crowd. But I screamed and freaked out and got the job.

'I shall never forget *Dr Who*. I only left because I thought I ought to branch out a bit to see if I could really act, or if I was just kneeling on Jon. But it was a wrench.

'I'm a bit like him in a way – an adventurer. Nothing ever freaked me out – mainly because I'm so short-sighted I couldn't see what was happening. My short-sightedness can be a problem, though. On the very first morning I started I fell over a rock on location and tore the ligaments in my leg. That was awful because everybody jokingly said: "Oh, it's just as well it's your first day. We can get that other girl in now." I had hysterics.

'*Dr Who* always was a fun thing. We joked all the time. Once everybody's cigarettes kept blowing up and they all blamed me. But there was only one phantom cigarette bomber. Who else but JP? It was great to work with my fiancé Stewart Bevan, too. He played Cliff Jones, the nutcase professor who came in to sweep me off my feet and out of the programme. We didn't actually meet through *Dr Who*, but nobody knew he was my boyfriend when he joined the series.

'There were some not so funny moments. I once had to drive a hovercraft, but pushed the wrong button. One side deflated and 40 sailors fell on top of me. It might have been fun for them . . .'

1973/4

THE TIME WARRIOR

(4 episodes) **by Robert Holmes**
Lynx, an alien space captain, lands his crippled starship in medieval times outside a castle belonging to the robber chief Irongron. Irongron offers shelter in exchange for modern weapons. Lynx uses his time machine to reach the 20th-century to steal scientists and equipment to repair his starship. Dr Who, accompanied by a stowaway, journalist Sarah Jane Smith, uses tracking instruments to take the Tardis to Irongron's castle . . . and a struggle against medieval violence and alien science.

INVASION OF THE DINOSAURS

(6 episodes) **by Malcolm Hulke**
London is evacuated after invasion by dinosaurs and the capital is under martial law. Dr Who, the Brigadier and Sarah Jane make an incredible discovery about a plot to alter Time itself.

DEATH TO THE DALEKS

(4 episodes) **by Terry Nation**
A space plague attacks all creatures in the Galaxy. The antidote – a mineral oil – can only be found on the planet Exxilon. Dr Who and Sarah Jane find themselves in the middle of a fight between humans, Daleks and Exxilons.

THE MONSTER OF PELADON

(6 episodes) **by Brian Hayles**
Dr Who and Sarah Jane accidentally return to Peladon (see *The Curse of Peladon,* 1972/3), where the spirit of the monster Aggedor is spreading terror and death.

PLANET OF THE SPIDERS

(6 episodes) **by Robert Sloman**
The blue anti-hypnosis crystal Dr Who found on the planet Metebelis Three and gave to Jo Grant as a wedding present (in *The Green Death,* 1972/3) is sacred. The giant spiders who live on Metebelis Three want it back.

I'M EASILY SPOOKED AND I HATE CREEPIES

'Until now the majority of my work has been on the stage – everything from Mary Warren in *The Crucible* to Desdemona in *Othello,*' says **Elisabeth Sladen.** 'I went to drama school in Liverpool and did most of my stage work around the Manchester area. Since moving to London I've done a reasonable amount of TV work, including *Some Mothers Do 'Ave 'Em* and *Z Cars,* but *Dr Who* is the first time I've been allowed to do a lengthy TV-stint. In fact, it was the producer of *Z Cars* who recommended me for the part.

'The first I knew of it was when *Dr Who* producer Barry Letts rang me one morning and asked me to come for an audition. I didn't know Katy Manning was leaving and I thought there was perhaps a small part in the offing. But after I'd done the audition I realised it might be something nice. Then I was immediately introduced to Jon Pertwee – and offered the job. I couldn't believe it.

'I must admit that I've never watched *Dr Who* regularly. But that's the nice thing about the programme. Every episode is reasonably complete in itself, so you don't have a lot of catching up to do. And I do like science fiction. I'm easily spooked.

'I don't mind monsters like the Daleks, but it's the smaller ones, the little moving things, that frighten me. I hate creepies. But then I think Sarah Jane Smith, the young journalist I play, does need a bit of protection. She thinks she can stand on her own feet and she'll always have a bash at things believing she's right. But somebody normally ends up telling her she's totally wrong–and it's usually the Doctor.

'One of the things I'll have to watch is my accent – or what's left of it. Until I went to drama school I had a pronounced Liverpool accent, though not as thick as Cilla Black's. But I still have a sing-song intonation and the accent comes through in times of stress.

'For instance, in one of my first *Dr Who* episodes I had to be dragged off into a castle by six toughs. "Ad lib!" the director shouted. In all the excitement I forgot myself and yelled: "Geroff!" my Liverpool accent roaring to the front. I was so ashamed – but they liked it and kept it in.'

TWO OF THE DALEKS LIVE IN MY FRONT DRIVE

'The Daleks came into my life in 1963, bringing with them the first taste of fame that Kate, my wife, and I had experienced,' says **Terry Nation,** pictured here with Daleks outside his home near Sittingbourne, Kent.

'I was invited to write the second *Dr Who* serial, and having read the brief could only predict disaster for the celebrated Doctor. How could this crazy fellow, who passed his time travelling all over the Galaxy in a police box, last more than a dozen episodes? I was close to turning down the offer, but then my not very creditable sentiments took over: take the money and fly like a thief.

'Given the power of hindsight? I would like to have created a more romantic setting for the birth of the Daleks. Edgar Rice Burroughs did spectacularly well, dreaming up Tarzan whilst lazing in his garden hammock.

'I had no such rich picture, so I was forced to invent my story afterwards. In a desperate attempt to satisfy persistent journalists, who wanted some profound explanation for my naming the Daleks, I told them that I'd been inspired by the letters on a volume of an encyclopaedia. But the fact is that no encyclopaedia in print covers those letters DAL-LEK. Anyone checking the facts could have found me out.

'My only source of inspiration came from TV – a wholesome case of the medium creating its own new image. I'd been watching a performance by the Georgian State Dancers and they seemed to me to be gliding across the floor, their feet invisible under long costumes. It was the strangeness of this movement I wanted to recapture in the Daleks: creatures with no apparent motive power.

'As for the name, it simply rolled off the typewriter. Once the blueprint for the Daleks – "hideous machine-like creatures . . . legless . . . with no human features" had appeared on pager Ray Cusick, the programme designer, took over and he was the man who must take the credit for the Daleks' startling pepper-pot design. It wasn't until I saw them that I realised they were just what I'd had in mind from the start.

'There must have been magic in 1963. Like everything else I touched that year, the Daleks went down like a house on fire. I was amazed by my own luck. Suddenly I was in demand from all sides, beseiged by offers to write comedies, plays, science fiction. We worked out that there was some work of mine shown on television for 40 weeks out of 52 that year. Fortunately I work very fast, and work best under pressure. The *Dr Who* scripts became my Saturday job. They were written one a week, each Saturday.

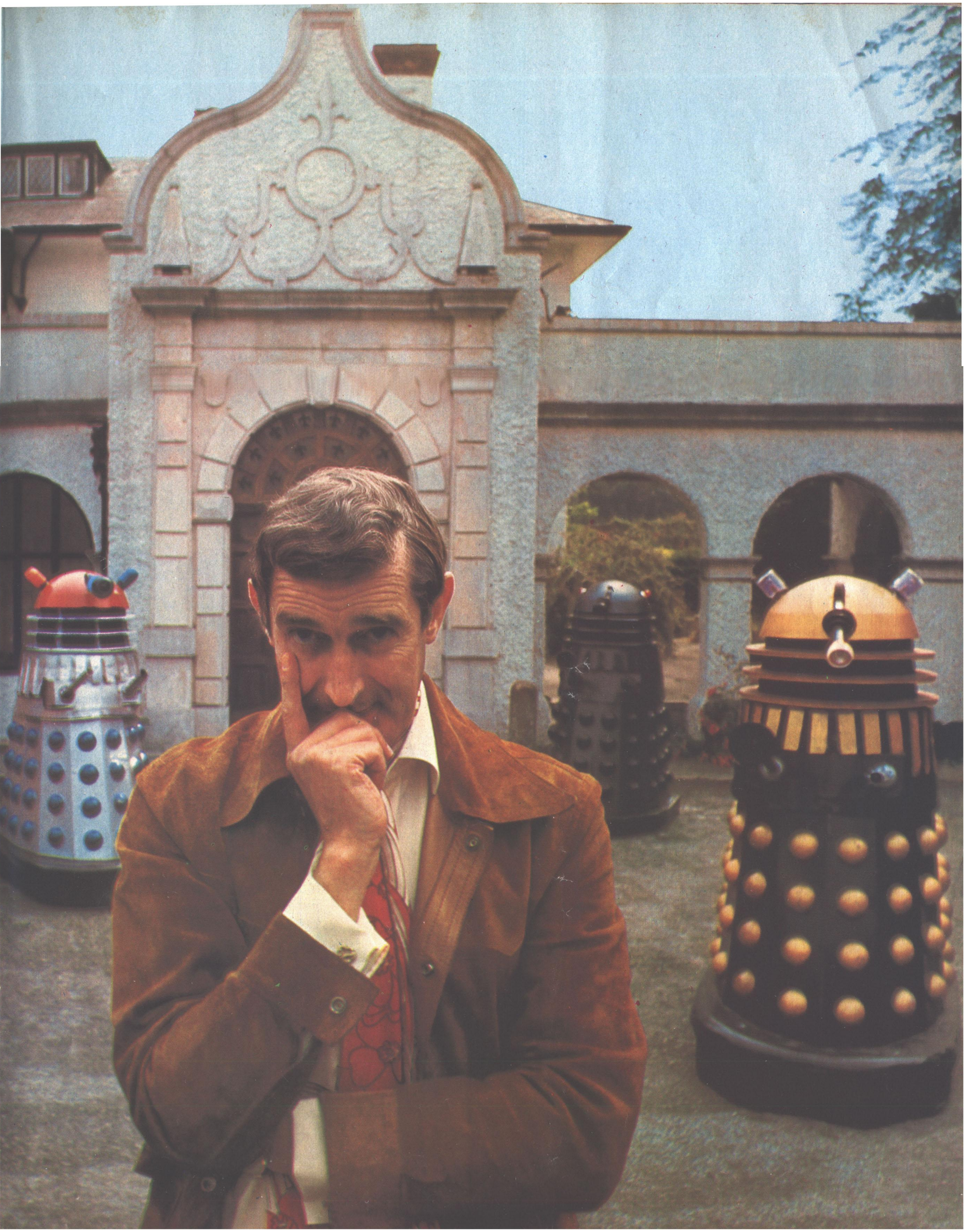
'It would be wrong to claim, as many people have, that I've grown wealthy on the strength of the Daleks. I've been earning my living as a writer for nearly 20 years, and of that time perhaps three months in all have been devoted to *Who* scripts. But I don't resent the inextricable link with the Daleks, who have brought me privileged recognition and provided my family with the gilt on the gingerbread.

'The revenue from the Dalek merchandise, 132 products in all, included jelly babies, wallpaper, drawing books, children's slippers and dressing-up outfits, and it brought in money "beyond the dreams of avarice." My family had taken a long time to accept the fact that sitting at a typewriter constituted an honest living, and now here I was receiving cheques without working for them at all!

'I have been asked more times than I could count to explain the success of the Daleks in philosophical terms. The answer is very simple: kids love to be frightened. To them it's like creeping up to the top of the stairs in the dark, which is surely a healthy emotion.

'Life with the Daleks has not been without problems. Their continued existence means that I find it impossible to write another successful monster into *Dr Who.* It would be difficult and foolish to rival the Daleks. Then, in the first series I wrote, I killed off the Daleks completely, having no idea popular demand would insist on their return. Nobody has ever killed off their brainchild so thoroughly as I annihilated mine, unless it was Conan Doyle, trying to rid himself of Sherlock Holmes. Fortunately the trusty Tardis came to the rescue: I brought the Daleks back in a time era *before* the date they were exterminated!

'To begin with we received sackfuls of readers' letters posing impossible problems. Children were always much smarter than I was at pointing out anomalies in the plot. I'd scratch my head and eventully write back: "I think you must be forgetting the secret formula X divided by 375 multiplied by 279, which I'm sure you'll agree overcomes your objection fully." '



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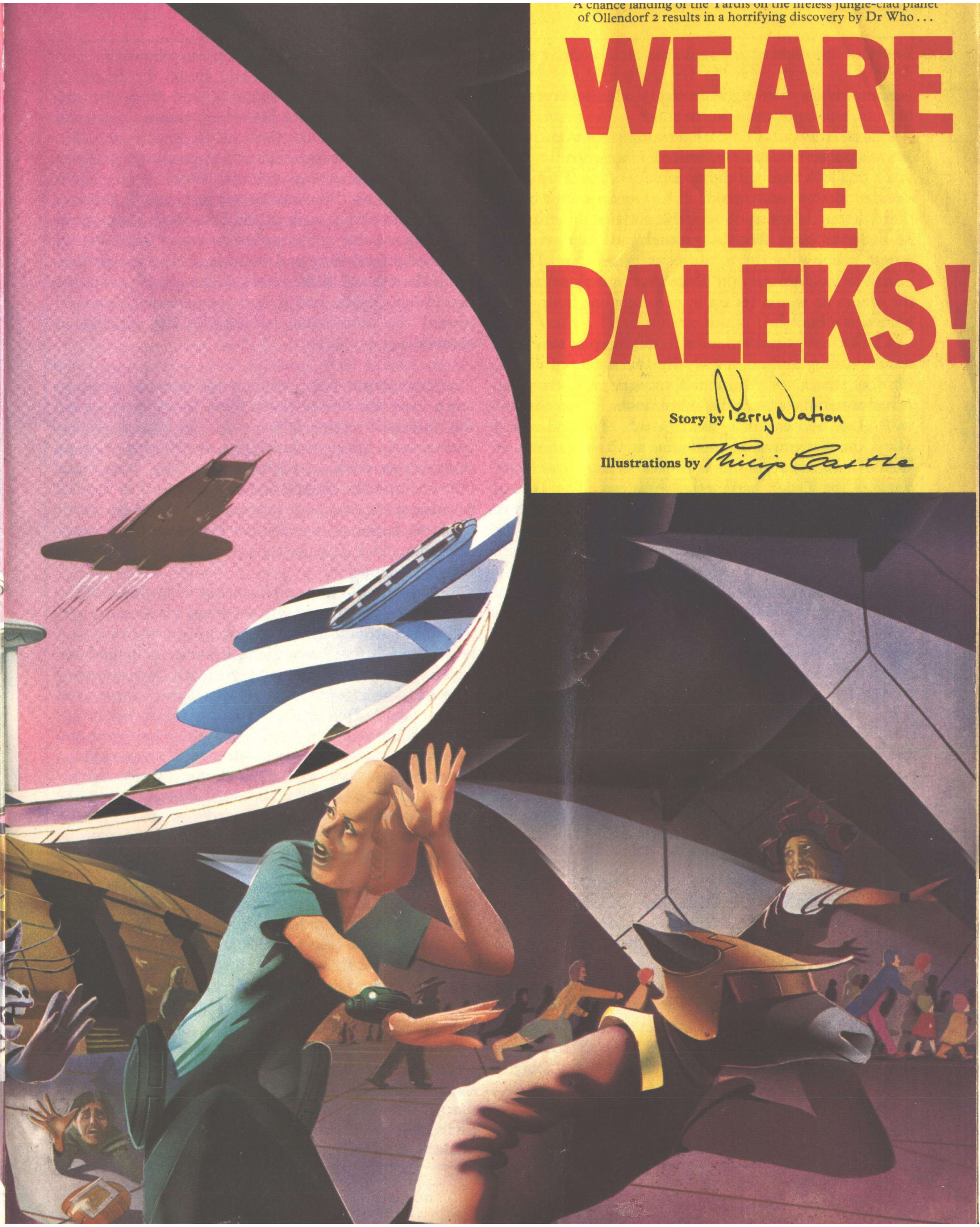
A chance landing of the Tardis on the lifeless jungle-clad planet of Ollendorf 2 results in a horrifying discovery by Dr Who . . .

WE ARE THE DALEKS!

Story by Terry Nation

Illustrations by Philip Castle



Doctor Who glanced at his watch. He was due back at the Tardis in ten minutes. He changed direction and pushed his way through the sickly white overgrowth, his footsteps squelching in the mud.

He had landed the Tardis here simply out of curiosity. It was a planet he had never visited. His companions had taken one look through the open door of the Tardis and decided to stay safely inside. The Doctor didn't blame them. It was the most inhospitable and hostile landscape he had ever seen. Marshy ground and thick writhing jungle half hidden by a nauseous green mist. Determined to look around, the Doctor set out alone, telling the others he would return in precisely one hour. That hour was almost up.

The Doctor edged around a thick clump of vines that were writhing and coiling slowly like a nest of vipers. His foot struck something half-submerged in the mud. It had a metallic ring. He glanced down. It was covered with algae and caked in mud. Much of it had rotted away, but there was no mistaking it. It was the outer shell of a Dalek. From the condition of the metal it was obvious the Dalek had been long dead. The Doctor tried to imagine what kind of violence had destroyed it. The Doctor looked around. Across the clearing was the dark mouth of a cave. He glanced at his watch again. There was still time.

Using a flashlight the Doctor edged cautiously down the shaft. At the innermost limit of the cave he found markings on the wall. A charred jagged pattern etched onto the rock. It was like a familiar trade mark that could only have been made by the searing blast of Dalek weapons. He swung the beam of the flashlight across the floor. Ashes and cinders littered the ground. He sifted them through his fingers. Fragments of burned wood and paper. He found a piece of metal, melted out of shape but still recognisable as a surgical instrument.

Then he saw the skeletons. Human bones whitened with age. They had been here for centuries and there was little doubt they had been victims of the Daleks. The Doctor looked down at them with compassion. What tragedy had been played out here? What had brought the men to this God-forsaken planet? He directed the flashlight at the skull of one of the men. The gaping black eye sockets seemed to stare back at him. What was the adventure that, for him, had ended in death? What story could he tell . . .?

The call came about seven in the morning, standard Martian time. Dag Richie sounded excited. 'Pack your things and get over here fast,' he said. 'You're going to be away quite a while so tie up any loose ends.'

I groped around in my mind for a good excuse to stay where I was – in bed, but I was so groggy with sleep I couldn't think of a thing.

I muttered: 'I'll be there in about two hours.'

'Make it one,' Dag snapped and closed the circuit. Somehow I managed to stagger around the apartment, throw some things into a flight bag, shower, dress and programme the auto-servant, all in 30 minutes. Ten minutes later I was standing on the transporter platform waiting for the cross-city link that would take me out to the Rocket Port. The transporter lines run high above the city and afford some of the best views of the great urban sprawl that makes up the capital of Mars. It was a hot bright morning and the domes that stretched as far as the eye could see reflected the glare back at the sun. A light breeze had shifted the pollution cloud out toward the mountains, leaving the sky as clear as diamonds.

The transporter was just moving into the platform when I saw the first Neutron flash. It was over toward the industrial section of the city. The roar of the explosion came micro-seconds later, as a column of smoke reared upward like a striking snake. Two more blasts followed quickly, their sound half-drowned as the raid warning sirens started to scream. The travellers on the platform began to race for the high-speed escalators, scrambling and clawing to get down to the safety of the subterranean levels.

I calculated I'd have more chance of getting killed in the rush than by staying where I was. I shielded my eyes and stared around the sky trying to spot the raiders. I heard them before I saw them. Coming up behind me. I spun around to see the two huge black ships sweeping across the dome tops at full power, making a second run at their target. One look was enough. Dalek long-range cruisers. Lightly-armoured ships built for speed and manoeuvrability in gravity conditions. They were flying a course that would bring them almost directly over my head. I could clearly see the open gun ports and the blaze of indiscriminate fire directed down at the city.

It was a typical Dalek terror raid, aimed at one prime target but ruthlessly collecting a bonus of death and destruction with random fire onto unprotected civilian areas. Schools, crowded shopping complexes, leisure parks were raked with fire as the big ships roared across the sky. I'd not seen a Dalek warship for nearly ten years, not since I'd served in the Outer Worlds War. It had been even longer since there had been a Dalek raid on Mars, so this surprise strike threw the city into helpless panic.

The two cruisers were travelling side by side and as I watched they banked slightly to move onto their bombing run and head directly for the spiral of smoke that marked their first attack. From the corner of my eye I saw a glint of silver above the Dalek ships. A formation of three single-seater combat rockets was swooping on the attackers like a flight of arrows. The Daleks spotted them too and turned all their fire power in their direction, bridging the distance between them with a continuous stream of Atronic charges.

The fusillade traced dotted red lines that converged on the combat ships. The leading interceptor was hit before it could fire a shot and exploded into a fireball of twisted metal and blazing rocket fuel. The second interceptor was hit and seemed to stand still in the air before it plummeted down to crash onto the massive domes of the Parliament Assembly Complex. The remaining combat ship made a violent turn, evading the wall of fire. It power-dived beneath the Dalek ships, its rockets screaming with maximum power.

It swept up under the belly of one of the cruisers and flew beneath it for a few moments, then its nose angled up and it rammed into the hull of the big ship. I heard the grinding shriek of the impact above the roar of the engines. Incredibly the two ships, locked together in a death hold, seemed to stay in straight flight for nearly another half mile, then, in what looked like slow motion, the Dalek cruiser began to disintegrate.

Amongst the falling debris I saw the familiar shape of a Dalek hurtle to the ground. The remaining Dalek ship continued inexorably toward its target. When it was very close its retro-rockets fired and its forward momentum slowed. The ship arced almost gracefully into a slow dive on a flight path that headed directly for the smoking target area.

It was a suicide attack typical of the fanatical Daleks. The cruiser vanished into the pall of smoke and in almost the same instant exploded into a fireball that leaped miles into the sky. The roar and blast of the shockwave hit me seconds later, throwing me to the ground and rolling me along the platform as helpless as a straw in a hurricane. I grabbed at a pillar and held on for my life. Two bodies hurtled past me, carried through the air on the blast. They crunched sickeningly against a wall. That they died instantly was certain, but the shockwave held their grotesquely twisted bodies flat against the wall like specimen insects pinned on a board. Only as the blast began to subside did they slither lifelessly to the floor.

I staggered a little as I got to my feet, still dazed. I stared around. Even this far from the blast centre the damage was enormous. The transporter carriages had been twisted onto their sides. The monorail had been cracked and was sagging dangerously clear of its supports. The dead and dying were all around me. Looking out across the city I could see the smoke from hundreds of small fires. Everywhere, shattered domes.

The Martian capital had been wounded. Badly wounded. I heard the wail of an ambulance as the emergency services started to swing into action. There was the roar of a huge fire fighting rocket as it glided over the Parliament Assembly Complex and started to pour down a rain of flame smothering foam.

I stayed on the transporter platform and did what I could to help with the injured. When there was no more that could be done I recovered my flight bag and went down the emergency stairs. There was no power for the escalators. I started the long walk out to the Rocket Port, detouring several times to avoid the larger fire areas. The Dalek ships had wrought terrible damage and it was obvious the death roll would be very high.

As I walked I had time to think. How had the Daleks been able to penetrate the auto-scan defences? They should have been seen and intercepted hours before they were in range to attack. Why had the ground defences not fired a shot? Why had only three interceptors got off the ground when we had a dozen squadrons that were supposed to be on constant alert? What target was it that was so important to the Daleks? I could imagine that a great many embarrassed defence officials were going to need answers to these and many more questions.

I began to wonder if there was any truth in the rumours that had been circulating for some years, that the Daleks had established a spy network on Mars. The gossip was that they had recruited collaborators, paying them highly or promising positions in government when the Dalek conquest came. Until now I'd always dismissed these stories as pure fiction, dreamed up by media reporters short on news. Now, though, it seemed there might be something in it.

I reached the Rocket Port in late afternoon. Strict security was being enforced. I gave a friendly nod to one of the guards. I'd known him for years. He looked at me as though I were a total stranger and, in a heavy voice that officials use when they are being authoritative, told me that nobody could get into the area without full security clearance.

He directed me to the identi-booth. I stepped in and dropped my identity card into the slot. I heard the ticking of the scanner as it read off the information and checked it with the computer. I placed my hands on the feeler pads. My palms tingled slightly as my skin pattern was checked. A mechanical voice asked me questions, checking my voice frequency against the records.

'Name?' it croaked.

'Joel Kendon,' I answered.

'Occupation?'

'Space geologist.'

'State your business.'

'I work for Astro Survey and Mining (Venus) Inc.

11

I'm here to meet with its owner. Man called Dag Richie.'

There was some more whirring and clacking, then my identity card dropped from a slot in front of me and the voice announced: 'Identity confirmed. You are cleared to proceed.'

I stepped through the inner door of the booth and onto the main concourse of the terminal building. Five minutes later I was in Dag Richie's office.

He looked relieved to see me and crossed quickly to shake my hand and ask if I was all right. I assured him I was. I told him I'd seen the raid and asked him if he knew what had been the Daleks' prime target.

'The rocket construction plant out in District Nine. Totally wiped out. The three new rockets they were building were almost completely destroyed.'

Dag looked grim. 'But they were almost ready for for launch, weren't they?' I asked.

He nodded. 'That's what makes the whole attack seem so suspicious. How did the Daleks know? The whole project was supposed to be top secret.'

I tried to find some consolation. 'At least the Daleks lost their two ships,' I said.

'Three,' Dag said. 'They lost three ships.'

'Two,' I said. 'I saw the whole thing.'

He held up three fingers. 'There was a news flash a few minutes ago. A Dalek interceptor landed outside the city limits. They've only just located it.'

'Was it damaged?' I asked.

'No. From all the evidence it looks as though they intended to land. There was no sign of the crew. There's a massive search going on in the area right now.'

Then Dag seemed to dismiss the whole matter from his mind and he got down to the reason for our meeting. He went to his desk and handed me a sheaf of computer-printed pages. 'Read that,' he said.

I glanced through the first page. It was nothing very new. It stated simply that in the early part of the year 3005, the company Astro Survey and Mining (Venus) Inc had launched an independent mineral detecting satellite. It went on to say that in its first two years of operation it had made fly-by probes of several unexplored planets and had located some deposits of high yield ore, but in quantities never large enough to make mining them a commercial proposition.

Dag edged forward on his chair and eagerly watched for my reaction as I turned the page. I didn't disappoint him. I think my face registered every emotion in the catalogue. I had to read the words a second time to be certain I understood.

'Is it true?' My voice cracked a little. Dag nodded and grinned so widely I thought his head would fall in two halves. He had good reason to grin.

The satellite had gone into orbit round a planet called Ollendorf 2 and started to beam back information. The computers had unscrambled the coded data and come up with the information that Ollendorf 2 was virtually made of Exxtellium. Its value was incalculable. Just one hundred tons of the metal mined and delivered to anywhere in the Solar system would make 'Astro' the wealthiest company in the space prospecting business. The new spate of Dalek wars in the distant planets had created a tremendous demand for Exxtellium. It was the only metal that could insulate against Dalek weaponry. Forty-three times more dense than lead, lighter than our minus weight alloys and stronger than C-fibre.

Its only disadvantage was its rarity. Intensive prospecting on over 15,000 planets had thus far produced only six tons of Exxtellium. This had been used to shield the hull of a space destroyer that was launched a short time ago, but which had already notched up an impressive list of victories against Dalek warships. The Minister of Galactic Defence had publicly stated that with an entire fleet of space destroyers built from Exxtellium we could end the Dalek menace forever.

Dag took a bottle from his desk and we had a celebration drink and talked about how rich we were going to be and how our life-style was going to change. Then we calmed down and got onto the serious business of how we were going to handle things. Dag was rightly terrified that one of the other space-prospecting companies might get wind of our discovery before we could stake our claim. It was my view that we had to move quickly and Dag agreed.

We'd blast off as soon as possible, using a Chaser rocket which, though it's small and uncomfortable, is the fastest thing in space. We'd land on Ollendorf 2 and, as required by interstellar law, set up a mining claim beacon. If no one else landed and challenged our claim within seven Earth days we would have exclusive mineral rights.

Then we would establish a base and a landing site for the auto-miner and ore carriers. This heavy equipment would take more than an Earth month to reach us. During that time we would prospect for the richest and most economic seams of Exxtellium. That might all sound quite routine, but there were other possible hazards. Space pirates . . . Daleks . . . and the planet itself.

I asked Dag what he knew about Ollendorf 2. 'There's no recorded landing,' he said. 'It was charted about a hundred years ago. It has a breathable atmosphere but there's no evidence of intelligent life.'

We spent the rest of the night discussing details. Dag made a few calls and gave orders for the Chaser to be prepared. I wrote out a list of the crew I wanted and handed it to Dag. He nodded approval as he read each name. I'd chosen the best people on the Astro payroll.

He glanced up at me. 'You've left two blanks,' he said. 'Who do you want for your navigation officer?'

'You,' I told him.

He tried to look modest but was obviously pleased. 'Thanks,' he said. 'I'll be glad to take your orders.'

I think he was shrewd enough to know I'd not made the choice simply to flatter him. Before he'd settled behind an executive desk he had been one of the best navigation men in the business.

'Who do you want for your pilot?'

I took a deep breath before I answered. 'Caesar.'

Dag reacted in exactly the way I expected. 'No,' he said. 'No, you can't take a chance on him. Anyway he's lost his licence.'

'The suspension ended a week ago,' I said. 'Dag, listen to me. Caesar's one of the great fliers. He's had a run of bad luck.'

'Bad luck!' Dag echoed. 'He's lost two ships!'

'He was senior officer on both those missions. He had to take the responsibility for the failure of others. Even the court of enquiry admitted that. They said they were entirely sympathetic but had to act within the letter of the law and suspend him.'

Dag wasn't convinced. 'Every broken-down pilot in the business hands out that kind of hard luck story.' He put a note of appeal in his voice. 'Joel, I can give you the names of a dozen top men. Good solid experienced rocket pilots.'

'I still want Caesar.' Dag threw his arms in the air in a gesture of exasperation. I kept my voice as unemotional as possible as I tried to explain. 'We'll be flying in a ship with no armament. We'll be too far out of range to get any protection from the defence fleet. If we run into trouble, any kind of trouble, I want a pilot who can make that ship twist and turn and fly like a bird. I want an instinctive, natural flier. Caesar's that kind of pilot.'

Eventually Dag agreed, though he remained unconvinced. I put in a call to Caesar's apartment and was told the circuit had been damaged in the morning raid. There were six hours left before take-off and not much for me to do, so I decided to walk to Caesar's place.

The smell of smoke still hung on the dawn air and a crimson glow in the sky showed that the fire in District Nine was still burning. Robot repair gangs were working on restoring power and communication lines, but apart from them the walkways were quiet and empty. Caesar lived in a residential hotel in the old part of the city, a jumble of domes that had been built by the early colonists. The area was the source of much dispute in the city government. Developers were eager to tear it down and build new super domes, whilst the preservationists were determined to save it as a piece of our cultural history. I liked it the way it was. There were ramps and roadways, memories of the time when our ancestors used wheeled transport. There were even some pieces of it built in brick and stone, something you're not likely to see outside a museum.

I started down one of the 'roads' that would bring me to the hotel when a security transporter came screaming past me and stopped about a hundred yards ahead. A squad of heavily-armed security men leapt out and raced toward the dark opening of an intersecting 'road'.

Almost at once there was a crackle of fire. A sound that once heard you never forget: the blast of Dalek guns. The leading three security men seemed to glow in a halo of white heat. I heard their screams as their bodies charred. As the glare faded they crumpled to the ground. The remaining security men dived for cover. I did the same. They aimed a stream of fire from hand weapons at the still unseen Daleks.

From the darkness I heard the croaking command: 'Attack! Attack! Attack!' Three Daleks glided out of the shadows sweeping the area with fire. I saw more men hit by the blast.

The thought of Daleks here in the capital city was so incredible that I found myself rooted to the spot as I stared at them. However, I moved swiftly enough when I saw a blaze of fire sweeping down a wall toward me. I dived into a doorway and lay flat. The Dalek blast roasted the wall a few feet above my head. There was a wail of sirens as more security transporters converged on the area. That the Daleks were going to be destroyed was obvious. They would be overwhelmed by sheer weight of numbers, but true to their ruthless savage nature they were going to cause as much death and destruction as they could. I chilled as I heard that old battle cry above the roar of the attack: 'Exterminate! Exterminate!'

An armoured transporter drove directly at them, hitting two and smashing them back into a wall. Then the driver very purposefully reversed, shifted into forward and went at them, again at full power. They crumpled like foil. The last Dalek raked the area with fire, hitting two more security men before it too was destroyed in a concentrated barrage of high-velocity explosive charges.

There was nothing the security men could do for those who had been hit. They stood in silent groups staring down at the shattered Daleks. I moved up to join them. From the muttered talk I heard I gathered this must be the crew of the ship that had landed on the outskirts of the city. What nobody could understand

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was what were the Daleks doing here, right in the heart of the city?

The area was becoming crowded now with excited sightseers. Many of them, I realised, had never actually seen a Dalek. I'd seen enough to last me a lifetime. I pushed through the crowd and made my way to the hotel.

The window of Caesar's apartment looked down onto the spot where the action had taken place. He was watching the clearing up operation I asked him if he'd seen what happened. He had, and we talked about it for a few minutes, but he didn't seem much interested so I told him the reason for my call. I expected him to be excited and enthusiastic. He wasn't. He listened politely to what I had to say, thanked me and said he'd like to do the job. That was all. I told him what time to report and he said he'd be there.

There didn't seem much chance of conversation with me being the only one who was talking, so I said I'd see him later and started to leave. I noticed an album of dimensographs on the arm of his chair. He'd obviously been looking at it. There were pictures of himself with a pretty Venusian girl and two attractive children. I nodded toward it. 'Your family?'

'Yes.' He picked up the album and closed it. I'd hit on another subject he wasn't going to talk about.

I got back to the Rocket Port and involved myself in the last-minute preparations for take-off. Finally the crew were all assembled and we boarded the shuttle to ride out to the Chaser's launch pad. Whilst the personal baggage was being stowed I took a last look around the complex of buildings that circled the terminal. Near the landing area a big Earth Lines space cruiser was touching down, bringing in another cargo of package-tour holidaymakers.

The tour operators were opening up new holiday planets all the time. One got the feeling that in a few years there'd be nowhere in the Universe without its colony of holiday Villadomes. It was only the fear of Dalek raids that had slowed down this development. Now we were setting out to bring back the means of totally destroying the Daleks. With them gone, how long would it take us to despoil the rest of the Universe?

It was the first time I'd considered the deeper and long term significance of our mission. With unlimited Exxtellium we could totally annihilate the Daleks and I had no doubt we would. But did we have that right? If we destroyed them, what made us better than them? Did the very existence of the Daleks in the Universe have some greater meaning? It was certainly only the menace of the Daleks that had welded the New Worlds into a single unit. The peoples of all planets had stopped warring against one another to unite and battle against a common enemy. With the Daleks gone would the fighting between ourselves start again?

The thought bothered me and I tried to shake it off. I took a last deep breath of what should have been good clean Martian air. Instead I got the choked-up smell of rocket exhaust fumes. I turned and climbed into the Chaser and made my way up to the flight deck.

Caesar was already half way through his blast-off check when I settled into the Captain's chair. I called space control and filed a false flight plan, claiming that we were making a routine prospecting trip through the asteroid belt. None of the crew had been told our destination or the purpose of our mission. Our actual flight plan was in a sealed container on Dag's navigation table. We were cleared for take-off and our ten beat countdown began. We had ignition at beat eight and Caesar eased the Chaser off the pad and took it into a nice gentle arc that would give us three orbits of Mars before we went into straight line flight out into space. It's a much slower take-off technique, but easier on tissue and bone than a vertical blast-off.

As we came round for the last time Caesar pushed out the Chaser's nose and we started the anti-curve towards the Asteroid belt. The Chaser was capable of quadrupling its speed every thousand space miles, but I ordered double and re-double. I didn't want any space-tracking station to become curious about our being in too big a hurry.

I glanced across at the navigation desk. Dag grinned at me and gave a parody of a salute. 'Course sir?' I told him to hold our flight line and to pass me sky chart seven. He punched a button and the Nav computer whirred out the chart. Dag handed it to me with another grin and another salute. He was enjoying himself.

The crew settled down to their routine jobs. Caesar put the ship on auto-fly and started to wander around the flight deck. He looked more at home here than sitting in his own apartment. Ziegler, the chief engineer, came up from his department and reported perfect function on all power units. We covered a quarter of a million space miles without incident. I spent the time making calculations on the space chart. Lleyn, our Astro-Meterologist, located a new comet up ahead. We shifted course slightly to avoid the buffeting we would suffer if we went within its influence.

I worked on the chart for a little longer, trying to decide on the best point to make our turn for Ollendorf 2. In plotting the course, security was still uppermost in my mind. I needed to find a way to make the tracking stations lose us. A way that would make us vanish from their screens. There was one method that the old fighter rocket pilots used to use. Very effective, but highly dangerous. I calculated the odds and decided it was worth the risk. I jotted down some figures on the chart and handed it back to Dag.

He'd hardly had time to glance at it before we were interrupted by Ravella, our communications girl. 'I think we're being followed.' She was standing staring at the scanner. Everybody on the flight deck crowded around her and she pointed to a tiny blip of light in the bottom left-hand corner of the screen.

'How long has it been there?'

Ravella shrugged. 'I spotted it about 15 minutes ago. It's stayed on our course and speed all that time.' We watched for a few moments longer.

'Any idea what sort of ship it is?' I asked her.

She shook her head. 'Too far back. I beamed an "Identity Please" signal at them, but they don't respond.'

I turned to Caesar. 'Take her around eight degrees to port and speed up to treble drive.'

Caesar repeated the order as he made his way back to his seat, and switched to manual control. He did it so smoothly there was no sensation of increasing speed or changing direction. The blip of light on the scanner diminished to a pinpoint and, following our original course, appeared to be veering off. Moments later it swung around to follow our new flight line and regained its original size on the screen as it matched our speed.

Ravella sounded tense. 'He's still with us.'

I called to Caesar. 'Any chance of outrunning him?'

He shook his head. 'You saw how quickly he matched our speed. That's a Chaser. He can do anything we can.'

I told Dag to set the course I'd given him. He moved to the Nav computer and started to feed in the figures I'd written on the chart. He punched some buttons and a sky map appeared on his screen with an arrowed line traced across it. The computer had calculated all the gravitational and magnetic influences, worked out the anti-curve geometry and laid out the course I wanted.

Dag stared at the screen then, not believing what he saw, cleared it. He referred to my figures again and re-punched the buttons. The computer delivered the course again. Dag turned and glared at me. 'This is going to take us right into the middle of a Black Space!' He said it loud enough for everybody on the flight deck to hear. Nobody said anything, but they all looked worried and nervous.

They had good reason. A Black Space is an area of enormous energy. So powerful that all instruments become virtually non-functioning and the ship has to be flown manually. But once you enter Black Space the tracking stations lose you. The idea is to cruise around inside the Space until you locate a flight of space debris that is travelling in the direction you want, so that when you break out you are camouflaged by the debris. It's a perfect way to hide, but the danger to ship and crew is high. It's like trying to run through a blizzard without letting any snow fall on you. And the 'snowflakes' in a Black Space can rip you apart or burn you to a cinder. I know only two pilots that I'd trust to fly me through Black Space. One of them is Caesar.

There was no reason why I should explain my orders to the crew, but considering the risk I was asking them to undertake I decided to let them hear my reasoning.

'I'd planned to go into a Black Space before we knew we were being tailed. It's the only way I know to make certain we're not tracked. Now we have a follower it's doubly important. We must lose him.'

Ziegler seemed to elect himself spokesman for the rest of the crew. 'Don't you think it's time you told us what this mission is all about and exactly where our destination is?'

'I'll tell you this much. The place we're going is, strictly speaking, outside the legal jurisdiction of the Galactic Federation. It's still an unadopted planet. We have to establish occupation of the planet for seven Earth days to register it as newly-colonized. Our claim beacon has no validity until that seven days is complete. If some other survey-mining ship should happen to drop in . . . or follow us . . . or get tipped off . . . well, then we'd have a war on our hands. We're not equipped for war. A small crew with only hand weapons, we wouldn't have a chance.'

Ravella chimed in. 'You said "tipped-off" . . . are you suggesting there might be somebody in this crew who'd do that?'

It was Dag who answered her. 'My competitors would pay millions to get their hands on this claim – and if they couldn't buy it, they'd kill for it.' He said it with such intensity and authority that nobody asked any more questions. I noticed that Ziegler looked very tense. His hands were clenched, but he said nothing. Everybody went back to their jobs.

Dag gave Caesar the new course and we started increasing speed. I stayed on the flight deck a while longer watching the scanner screen. The blip of light showed we were still being followed. It changed course and speed as we did and stayed on our tail. The atmosphere in the ship was electric now and the crew only spoke when they had something to say about the running of the Chaser. I went down to my cabin.

It was something like an hour later when Dag came bursting in on me. He was holding the metal case that contained the flight plan to Ollendorf 2. Without a word he handed it to me. The seals were broken. I opened it quickly and riffled through the typed sheets. Two of the pages were out of sequence. Somebody in the crew knew where we were going.

'Any idea who did it?' Dag shook his head. He looked ashen. I could only offer one consoling thought. 'Well, whoever got the information still has to pass it on,' I said. 'I'll have Ravella close down the communications board. Ban all outgoing transmissions.'

Dag nodded slowly. 'In the circumstances it's all we can do. Just have to hope the information hasn't been sent out already. I'll tell Ravella.'

Dag had only been gone a few minutes when I felt the first lurch as the ship entered the outer influence of the Black Space. I started back up to the flight deck and had to use the handrail to avoid being thrown about as the turbulence became more intense. By the time I reached the deck the crew were all strapped in and Caesar had the ship on manual control. He looked glad to see me and immediately requested permission to reduce speed. I agreed and we instantly slowed down. The ship seemed to stabilise a little and we stopped wallowing quite so obviously.

From the scanner Ravella reported that our tail was still with us and was beginning to gain. I'd expected that. Whoever was in command had realised we were running for the cover of Black Space and wanted to get up close in the hope of keeping visual contact. I was counting on the fact that when he hit the turbulence he too would be forced to reduce speed.

I glanced across at the instrument panel. Needles were flickering erratically across the dials. Warning lights were flashing, indicating that instruments were not registering accurately. Lleyn and Dag Richie were concentrating on the forward and side viewers watching for obstructions in our flight path. It gave me a lot of satisfaction to see the crew were working like a team now. Caesar's hands on the controls worked with the delicacy of a brain surgeon. Correcting, adjusting and trimming the ship through the violence of the energy storm. He was very tense, but there was something in his face that suggested he was enjoying the excitement.

Ziegler reported that he was going down to the engine room and he swayed like a tightrope walker across the rocking deck. There was something about Ziegler that I didn't like, but I had no time to rationalise the feeling before Dag yelled a warning: 'Mass on your port side. Coming fast!'

Caesar responded instantly, throwing the ship into a deep dive. The mass, which turned out to be a fireball of molten energy, screamed above us. There was no way of knowing exactly how close it came, but the intensity of its heat, even in the micro-seconds it took to pass, caused the paint on the roof of the cabin to blister. There wasn't even time to feel relief before Lleyn shouted: 'Meteorite shower dead ahead!'

Caesar hit the retro-rockets with full power. The abrupt deceleration drove us against our safety harness with such force I thought my ribs would crack. The fixing bolts that held Ravella's chair to the floor snapped and, with her still strapped in, the chair skidded across the floor and smashed against the bulkhead beside Caesar. Not for one instant did he break his concentration to even glance at her. I did. The chair was on its side and Ravella was very still. A wound on her head seemed to open like the petals of a flower as it began to gush with blood.

I hit the release on my harness and, fighting the G Force, crawled across to her. I heard the rattle of meteorites as they started to pepper the hull. The meteorites were probably no larger than grains of sand but they were travelling with such velocity that they could pierce metal plate. I hoped the self-sealing system was fully operational. The meteorite storm swept on its way and we moved into forward drive again. The damage report control registered that there were 31 minute punctures near the tail. All had been sealed.

For the next three hours we rode around in the Black Space, tossed and buffeted unmercifully. The stress on both the ship and crew was enormous. Through it all Caesar piloted us with skill and courage. Half a dozen times he saved us from what seemed certain destruction. I'd done what I could for Ravella. Cleaned her wound and covered it with a Plasmagraft. She kept drifting in and out of consciousness. Lleyn located a flight of space debris that was moving roughly in the direction we wanted to take. Caesar angled the ship around and followed it, matching its speed.

Gradually we began to edge out of the Black Space. As we moved further away from the source of the raw energy, our instrumentation began to resume its normal functions. I could see the tensions beginning to ooze away from the crew, leaving them drained and exhausted. Now that I felt we were in the clear I wanted to thank and congratulate them. I moved up beside Caesar. He gave me a weary grin.

Dag joined us. He looked slightly shamefaced. 'Caesar, I want to apologise. I didn't want you to pilot this mission. But Joel insisted. I've got to tell you. I was wrong. I don't know anybody who could have done the job the way you did. Thanks.'

Before Caesar could say a word there was a violent crunching impact somewhere near the rear of the ship. The scanner screens blacked out instantly and the ship lurched into a spin. Caesar battled the controls to bring us back on an even course while every warning light and alarm buzzer seemed to jump to life. The lighting dimmed as one circuit after another was cut. Fuses blew like fireworks and the cabin was filled with the acrid smell of burning insulation.

Lleyn yelled from the damage control register: 'Hull pierced in tail section. Scanning equipment cables severed! Main power units inoperative!' I knew that the automatic damage repair system would be sealing off the damaged area and switching in new emergency circuits. This was confirmed as the lights started to glow again and gradually grew brighter. The scanner screens remained blank, suggesting the damage they had sustained was beyond repair. This meant we were going to be blind for the rest of the voyage. From here on our only way of seeing would be through our instruments. We were like a blind man who'd lost his guide dog in the middle of heavy traffic.

I told Dag to check and double check our course to Ollendorf 2. This he did and fed the result into the auto-pilot. Caesar gratefully switched over control of the ship to the computer. He released his harness, stood up and stretched. He was close to exhaustion. 'I'll go and take a look at the damage,' he said, and walked slowly off the flight deck.

Dag and I did what we could to make Ravella more comfortable. I peeled the Plasmagraft off her brow. The wound had totally covered with a new skin and the only trace that remained was an angry bruise. I put Lleyn in charge of the flight deck and Dag and I followed Caesar down towards the tail.

The scuffling footsteps, the thuds and the grunts of pain were coming from the engine room. Dag and I exchanged a look, then started to run forward. I threw open the door in time to see Ziegler crash backward across the room and slither to the ground. As he fell, his hand was reaching to draw the anti-personnel weapon that was strapped to his waist. Caesar was quicker. His weapon was already in his hand and aiming. Before I could stop him he fired. I heard the hiss of the blast and saw Ziegler convulse as he was hit full in the chest. He writhed for a moment, then slumped. Dag moved to kneel beside him and I turned to where Caesar was standing holding on to a rail and breathing heavily. There was bruising and blood on his cheek.

'What happened?' I demanded. Caesar couldn't speak for a moment, still gasping for breath. Dag looked up from Ziegler's body. 'He's dead.'

'He didn't hear me coming in,' Caesar said, his words coming in a panting rush. 'Then when he realised I'd seen what he was doing he jumped me.' Caesar pointed to a small plastic cube lying on the floor. 'He was trying to use that.' I picked it up. It was a powerful high-frequency etheric transmitter. It was still switched on.

Dag took it from my hand and looked at it. 'I guess we know now who broke open the sealed destination,' he said. 'He was trying to pass the information on.'

'He was still giving a call signal when I came in,' said Caesar. 'I don't think he'd made contact.' I hoped Caesar was right.

The rest of the flight went smoothly enough. I ordered the crew to get some sleep while I stayed on watch. I became almost mesmerized by the flickering lights on the computer as it read off and responded to the course we had set for it. I hated being entirely dependent on machines. Lleyn relieved me, and for a time I was able to drift into an uneasy sleep. I was wakened by the roar of the retro engines and the abrupt deceleration that was the overture to a landing.

Those last few minutes of landing were as tense as any I have ever known. Take-off and touch down are the most dangerous moments of any flight. The danger of this particular touch down seemed magnified still more because we could not see anything. I need not have worried. The computer set us down as gently as if we were landing on a tray of eggs. The engines cut out. The tape on the computer spun off its reel. We were there.

Ollendorf 2 is a minor planet far out on the edge of the 11th system. A little larger than Earth, it was considered totally unimportant. No surface exploration of the planet had ever been made, so as far as I was aware we were the first humans ever to touch down on it. A quick external check showed an atmosphere of moderate temperature and high in oxygen. The radiation figure was lower than that on Mars.

I moved down to stand beside the exit hatch. Ravella, Caesar and Dag joined me. Lleyn was staying to guard the Chaser. I hit the control to open the hatch. It slid back and we were instantly engulfed in a billow of damp green mist. It wasn't like any water mist I'd ever known. The droplets had an unpleasant greasy quality that made them cling to the skin. Then there was the smell. Rotting vegetation. Decay and corruption.

Caesar stared out through the mist. 'I don't see this becoming a holiday paradise.' We stepped onto the auto-lift and its mechanism whirred us down to ground level. There's usually a feeling of excitement when you first step onto the surface of a totally unexplored planet. Not this time. I felt fear. Raw shivering fear.

I took a pace forward and felt the ground squelch under my foot. Slime oozed up around my ankle and the ground gurgled as I walked forward. A tiny moan of wind shifted the mist slightly and I got a hazy view of the place in which we had landed. We were in jungle. But the sort of jungle that appears only in nightmares. Nothing green. The plants were a sickly grey white like something that had never seen the light. They had thick fleshy stems that contorted and seemed to writhe upward to be lost in the swirling green mist.

Ravella reached out to touch one and I saw her hand recoil and a look of total revulsion cross her face. 'They're warm,' she said. 'Sticky and warm.' She looked at her palm. It was smeared with an oily transparent substance. With a quick nervous motion she rubbed her hand clean on her jacket.

Until now the squelching made by our footsteps was the only sound of which we'd been aware. Dag gripped my arm and motioned for me to listen. We all stood quite still. For a moment I heard nothing, then as my ears became attuned it began to register. A low sound. Wheezing, throaty and asthmatic. From another direction came a low moaning. The gasping of something that was in terrible pain. The animal life, if animal life it was, sounded like creatures in the most dreadful torment. Creatures that no longer had the strength to shriek their pain, but could only whimper and sob.

In all my life I'd never heard sounds that so chilled me with terror. I felt the clawing hand of fear run across my neck. A quick glance at my companions told me they were in the grip of that same dread. Ravella's very human screech of terror came almost as a relief. I spun toward her. She was staring, frozen in horror, at something crawling, no crawling is the wrong word, oozing up across the ankle of her boot.

Its shape changed constantly as it slithered upward. I grabbed at her and raked the instep of my boot across her ankle, crushing the thing back into the mire. Even through the heavy plastic sole of my boot I felt it writhe as I pressed down on it.

The bruise on Ravella's forehead seemed doubly dark as the colour drained from her face. Her voice was hardly more than a whisper. 'What was it?'

I shook my head. 'I don't know.' I glanced at the side of Ravella's boot. Its smooth plastic surface was blistered in a line that marked where the 'thing' had crawled. It looked like it had been brushed with powerful acid. I tried not to think what effect it might have if it had crawled onto the skin.

Caesar called our attention to the fleshy plant life that surrounded us. He pointed to the long tentacle-like vines. They were moving. Snakelike, they were writhing very slowly toward us as though they could sense us. Caesar spoke quietly. 'I've been watching them. They move very slowly, but their sense of direction is infallible. They're all coming directly toward us.'

'Perhaps they're just curious about us,' I said.

Caesar didn't take his eyes from the advancing vines. 'But curious about what? If we're good to eat?' He took a glove from his pocket and, crushing it into a tight ball, tossed it within reach of the tip of the nearest vine. The tentacle which had been so slow-moving now swished into life with the speed of a whiplash. Its tip splayed open into a 'V' shape. The space between the angle was covered with a veined membrane. It closed around the balled-up glove like a fist. Perhaps gloves weren't its favourite diet, because after a few seconds the tip of the vine opened again. The glove was shredded to a tangle of string like fibres and stained with a vile-looking liquid. Having discarded its prey, the vine resumed its slow progress toward us.

We shuffled back a few paces. The creeping vines changed direction to follow our course. I'd been so absorbed I'd forgotten about Dag. He called to us, his voice very excited. 'Look at this.' He was kneeling in the sludge, prodding an ore-detector into it. As he withdrew it he shook off the mud and we saw it was speckled with gleaming granules of metal. He scraped some off into the palm of his hand.

'It's Exxtellium,' he said. 'Pure Exxtellium. It doesn't even need refining!'

I wished I could share his excitement, but seeing the grains of metal seemed only to strengthen my presentiment that we would never mine the Exxtellium or ever return to our homes on Mars.

From the corner of my eye I saw something move on the edge of the clearing. I stared, trying to penetrate the mist. Then for a second or two I saw it clearly. The figure of a man, or at least a humanoid. He stood, quite motionless, gazing at us. A drift of mist obscured him for a moment and when it cleared he was gone.

I looked at the others. They were still examining the Exxtellium. They had seen nothing. All the survey reports I'd read about Ollendorf 2 had stated there were no indications of higher life. If they were right, then my imagination had started playing tricks. Not wanting to alarm the others, I said nothing. I asked Caesar to go back to the ship and bring the weapons. I had the feeling we might need them. He moved away into the mist and Dag and I started to run more tests with the mineral detecting rod. Ravella recorded our notes on her wrist tape. We confirmed Dag's first findings. It seemed that Exxtellium was as common on Ollendorf 2 as was sand on Earth. After about ten minutes, Caesar had not returned. I told the others to stay where they were and set off toward the Chaser to look for him.

I almost tripped over Lleyn's body. He was lying

half-buried in the ooze. His jacket was stained with blood. I knelt beside him and cradled his head in my hands. He was alive. Just. For a moment he couldn't focus his eyes. Then he recognised me. He started to speak, his voice no more than a whisper. I put my ear close to his mouth. It was too difficult to hear what he was saying as the words rattled in his throat. Then his body went limp. I felt for his pulse. He was dead.

I lowered him back to the ground. His left hand was clenched in a tight fist. I prised the fingers open and took a small red disc. I didn't need to examine it to know what it was. There was nothing more I could do for Lleyn. I turned and made my way back to Dag and Ravella. As I joined them there was a crashing in the jungle and Caesar came through the mist at the run. He was carrying an armful of weapons.

'Lleyn isn't in the ship,' he gasped. 'I've searched the whole area. There isn't a sign of him.'

Caesar handed out the weapons, keeping one for himself. With a note of alarm in my voice I shouted: 'Look!' I pointed to something behind Caesar's back. As he spun around to stare I swung the barrel of my gun and caught him a hard blow on the back of the neck. He fell to his knees, dazed. I reached down and took his gun and threw it aside, keeping my own weapon levelled at him. Dag and Ravella looked at me as though I had gone mad.

'What are you doing?' Dag demanded. I ignored him. I was angry now. I prodded Caesar with my foot.

'Get up,' I said. 'Get on your feet.' He staggered up, and seeing my gun levelled at him raised his hands. I tossed the red disc to Dag. 'Take a look at that.'

He recognised it at once. 'A homing beacon!'

'That's right,' I said. 'Sending out a regular signal so that anybody tuned into it can locate exactly where we are.'

Dag looked at me. 'Where did it come from?'

'Lleyn found it in Caesar's kit.'

Caesar tried to look bewildered. 'I don't know what you're talking about.'

'You weren't thorough enough this time, Caesar. Lleyn was still alive when I found him. He told me what happened. You got back to the ship just as he found it. You knew he recognized what it was and so you had to kill him. You just didn't do the job well enough.'

Caesar realized any more protestations of innocence were useless. He shrugged.

Dag still didn't fully understand. 'But what about Ziegler?' he said. 'Caesar found him trying to use a transmitter.'

'It was the other way around,' I said. 'Caesar was using the transmitter. He killed Ziegler and was able to think fast enough to switch the story when we went in and found them.'

Dag's face went livid with anger. He raised his gun and his finger tightened on the trigger. I stepped in front of him.

'Not yet Dag. First of all I want to know who he's working for.'

Almost like an answer we heard the roar of retro rockets firing above our heads. We stared up through the mists to see the glowing spouts of rocket flames as a Chaser eased itself down for a landing less than 50 yards from where we stood. My attention was off Caesar for only a few seconds, but that was all he needed.

He charged at me head down and sent me backward into the mud. Before I could recover he dived for the gun I'd thrown away. Dag tried to get in a shot, but I was in the way. I rolled aside and he aimed, but Caesar was quicker. From his position on the ground he fired a sustained blast that caught both Dag and Ravella. They jerked into the air like puppets. A reflex action tightened Dag's grip on the trigger and he fired a useless blast into the sky. They were both dead before they hit the ground. I scrambled to reach my weapon, but Caesar was on his feet and covering me before I could touch it.

We stood facing one another, both covered in mud and slime. The landing blast from the newly-arrived rocket had blown away the mist and we could see it clearly now. The motors were switched off and silence settled over the jungle again. Caesar never took his eyes off me. 'You wanted to know who I was working for,' he said. 'You'll find out soon enough.'

The hatch on the Chaser opened and I couldn't believe what I saw. Daleks started to file out. I turned to stare at Caesar.

'Not what you expect from a Chaser rocket, is it?' he said. 'It's pretty simple really. They captured it a month ago.'

'You're working for them?' I asked.

He nodded. 'That shoot-up with the security forces the night you came to my hotel. It was me the Dalek patrol had come to contact. I'd been with them only minutes before the fighting started.'

'Why?' I asked him. 'Tell me why anybody would work with the Daleks?'

When he answered the violence had gone from his voice. I had to strain to hear him. 'I've got a wife and family,' he said. I remembered the album of pictures in his apartment. 'They were on a holiday. There was a Dalek raid and they were captured. They're prisoners on Skaro right now.' He shrugged. 'The Daleks made me a deal. If I'd co-operate, spy for them, my family would be safe. If I didn't . . .' He left the sentence unfinished. He looked at me with what might have been an appeal for understanding. 'What would you have done?'

I couldn't answer him. I didn't even want to think about it. I knew only that he had killed four of my crew. He had destroyed our mission and by bringing the Daleks to Ollendorf 2 had ended any hope that man would be able to mine the Exxtellium that could destroy the Daleks. For there was no doubt in my mind that the Daleks would fortify the planet so heavily that no invasion force could ever land here.

In the time we had talked, the first of the Daleks had disembarked and started toward us. Caesar moved to meet them. They halted a few yards apart. Caesar said: 'The planet is yours. I have kept my part of the bargain. Now I want my family back and a secret place to live on one of the outer planets. I can never go back to my own people.'

For a moment the leading Dalek said nothing, then it grated out that one icy metal word: 'Exterminate!' Their weapons crackled and Caesar was engulfed in a wash of burning energy. He was haloed in a flickering blue light, his arms stretched to the sky. I saw and heard all this in an instant of time too brief to be measured, for I had turned and was running. Running blindly in total terror. Running as I had never run before.

I was aware that the Daleks were firing at me and I heard the crackle of their blasts all around me, but I went on running. They were coming after me and the knowledge drove me on. I tore aside the vines and fleshy plants that grabbed at me. I stumbled headlong into the mud and pulled myself clear to stagger on. How long and how far I ran I will never know. I do remember falling and striking my head. Before the darkness closed around me I recall trying to press my body deeper into the mud in a desperate effort to hide. I must have been successful, because the Dalek patrol didn't find me. But somebody else did.

I wakened lying on the dry floor of a cave. There was a man kneeling beside me. I tried to speak, but he pressed a hand over my mouth and made a signal for me to keep quiet. As I became more aware I could hear the sounds of Daleks outside the cave. They were barking orders, still searching for me. After what seemed an age they began to move away. The man moved up to the mouth of the cave. I stared at him. He was an Earthman. Quite old. His body emaciated beneath the ragged clothes he wore. His face was ravaged with time and fear, as though it had looked upon all the evils of the Universe. This was the man I had seen earlier in the clearing. As he came back toward me I remembered. I'd seen the face before. I knew him.

He was Bryant Anderson. Some years earlier he'd made headline news when he had been appointed to head a government inquiry. As an anthropologist he had proposed the theory that the Daleks would become more vulnerable if we knew their true animal nature. For instance, were they prone to any diseases? Would they fall victim to certain types of gases? How did they breathe, eat, drink, sleep? Anderson argued that by knowing them totally we might learn their weaknesses. Financed by considerable government funds he had started his investigation. His initial findings were widely published. Then he seemed forgotten. Years later it was reported that he was missing, presumed dead.

Anderson helped me to my feet. 'Keep your voice down,' he said. 'There's a Dalek stationed quite close.' He beckoned and I followed him still deeper into the cave. Here there was a crude bed and table. A few cooking things. And there were papers. Hundreds of papers and files scattered around the area, all of them filled with his tight, crabbed handwriting. Off to one side was a workbench with racks of scientific instruments. In contrast to the rest of the living area this part was neat and clean. He gave me something to eat and drink and I told him what had brought me to Ollendorf 2. He coughed a good deal as we talked and it was evident that the effort was exhausting him. Clearly he was a dying man.

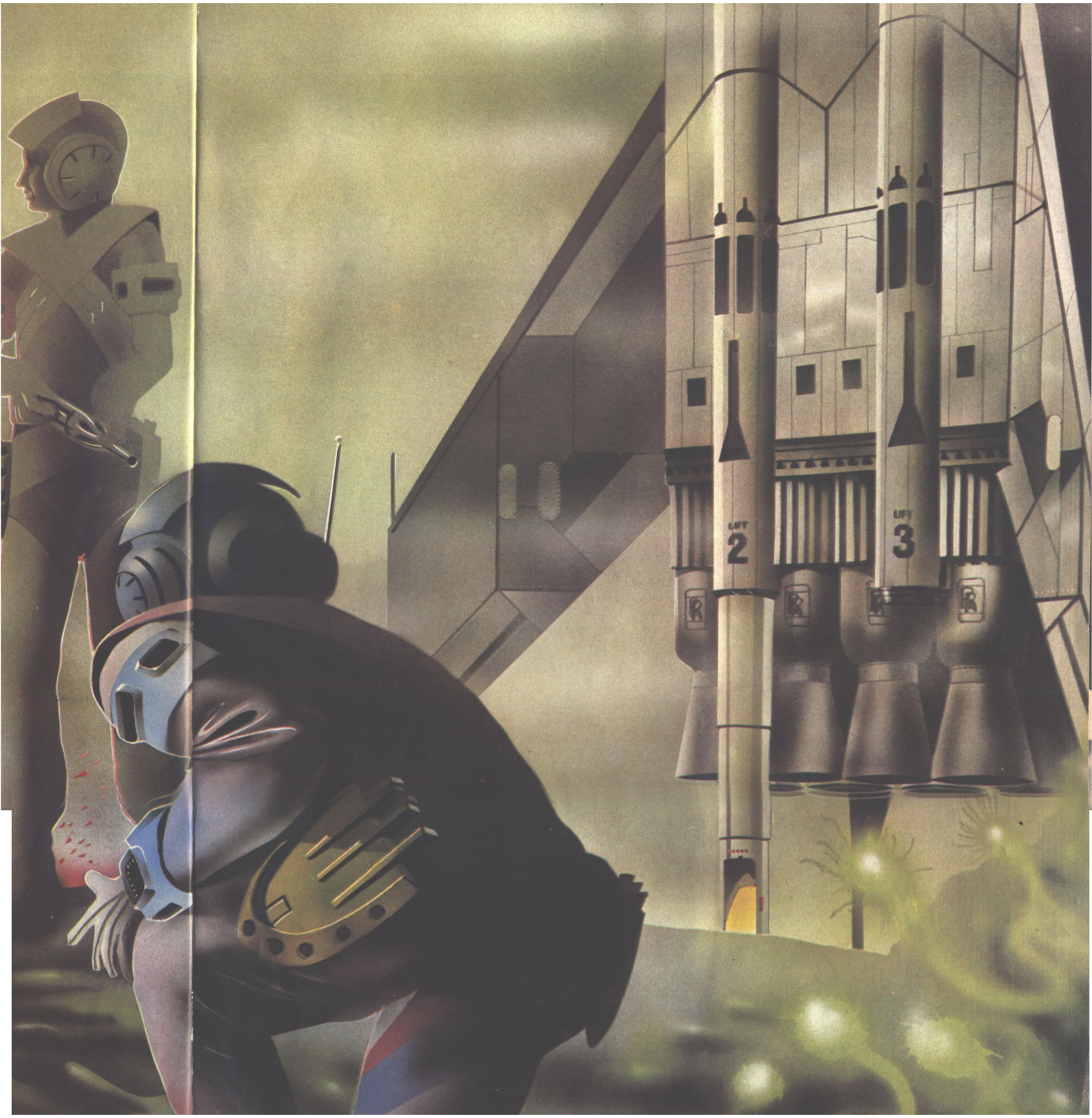
It was as though he read my thoughts. He smiled at me. 'You're right,' he said, 'I don't have much more time, and I'm grateful for that.'

We talked for a little longer and then he excused himself, saying that he must rest. He lay on the bed and fell into a deep unnatural sleep almost immediately. I glanced around amongst the books and papers and finally picked up a heavy file across the front of which were written the words 'The Anderson File.' I browsed through it but found most of its pages too highly technical. It was only at the end of the document, under a section titled 'Summary,' that I began to have some understanding of its meaning. Anderson's investigation had begun in Earth's pre-history.

When the creature that was eventually to develop into 'Man' first appeared on the surface of the Earth, the planet was visited by a scientific expedition from Halldon. They captured several hundred of these ancestors of man, these primates who were already beginning to stand erect, and transhipped them to the planet Ameron. Here they were housed in a colony that was a perfect reconstruction of a section of Earth. The atmosphere, the flora and fauna, everything was totally indistinguishable from Earth.

But the colony was in fact nothing more than a vast

2
3


LIFT
2
LIFT
3
RR
RR
RR
RR

scientific laboratory. It was an 'accelerator'. The process of evolution had been speeded up to an incredible degree. Where on Earth the discovery of fire and the invention of the wheel took many thousands of years, here in the colony on Ameron it took these same creatures only 50 years to reach that stage.

The Halldons continued to observe the evolution of the Earth creature for many centuries. They saw them learn to plant their food. To build. They saw them fight amongst themselves. In only 200 years they were making machines and shortly after they had learned to fly. They made weapons of fearful power, and it was only then that the Halldons decided that the experiment had gone far enough and were determined to end it with the destruction of the creatures they had named Man. But Man was not allowing himself to be destroyed. The Earth creatures fought back, invented new technology to defeat the Halldons and ultimately destroyed them. So they continued to develop, on the same path as their brothers on Earth, but millions of years ahead.

A sharp sound jolted me back to reality. So absorbed had I been in my reading it took me a moment to remember where I was. The noise wakened Anderson and as his eyes opened he stared at me in terror. He leaped from the bed and snatched the file from me and threw it across the cave. He blazed with anger. 'You shouldn't have read that . . . I should have destroyed it.'

Before he could berate me further the sound that had alarmed us came again. The jagged voice of a Dalek from outside the cave. It was croaking the word 'Emergency!' over and over again.

Anderson looked toward the mouth of the cave. 'The vines,' he whispered. 'Come on.' He grabbed my arm and pulled me after him, pausing only to pick up a small axe. We stepped out of the cave and quickly located the sound. We pushed our way toward it.

The Dalek had been pulled onto its side and was covered in a writhing tangle of vines. Its weapons were pressed down into the mire and so it was helpless. For a man so near death Anderson showed remarkable energy. He started to hack at the vines, slashing and cutting through them. As he did they coiled and uncoiled, twisted and turned. When Anderson had cleared them from the head of the Dalek he beckoned me to join him. The Dalek was still giving its emergency call.

'Help me get the top off,' he said, and started to pull at the upper section of the Dalek. Together we heaved and finally pulled it free. 'Take your jacket off,' he said.

I didn't understand, but did as he told me. He reached into the top of the open Dalek with both hands. His eyes closed in revulsion as he found what he was seeking. He gave a sharp pull and I saw what he had dragged clear.

No nightmare, no dark imagining could match the horrible reality of what he held in his hands. I felt sickened and turned my head away. It was only the sharp command in Anderson's voice that made me turn toward him again.

'Your jacket man, your jacket!' I passed it to him and felt merciful relief as he draped it over the Dalek. 'Now help me carry it,' he said. With my jacket slung between us like a hammock we staggered back to the cave. Inside we dumped our bundle onto the bench. He unwrapped the jacket and again I felt the nausea sweep over me as I saw it. It was still alive and moving. Anderson took a scalpel and made a quick incision. It quivered slightly then lay still. For the next 15 minutes Anderson dissected with skilled strokes. He probed and examined and at last he was satisfied. When he turned away from the bench the energy seemed to drain from him. He pitched forward and would have fallen had I not caught him.

'You found something?' I asked him.

He shook his head. 'I confirmed something,' he answered. His voice was frail now. I felt his pulse. It was very weak. He was drifting into a coma.

From outside the cave I heard the sound of the Daleks returning. They were calling to one another, their voices drawing closer. It could only be a matter of time now before they found our hiding place. I turned urgently to Anderson and patted his face, bringing him back to consciousness. His voice sounded far away.

'The most destructive force in the Universe.'

'What is, Anderson? What did you find out?'

There was a clatter near the entrance to the cave. The Daleks were close now. There was very little time. I had to know Anderson's secret. He started to ramble.

'I couldn't publish my report. I couldn't let the world know. I had to hide. How could I tell them?'

'Tell them what?' I asked.

'The most savage animal in creation.'

'What is?' I said. 'Tell me!'

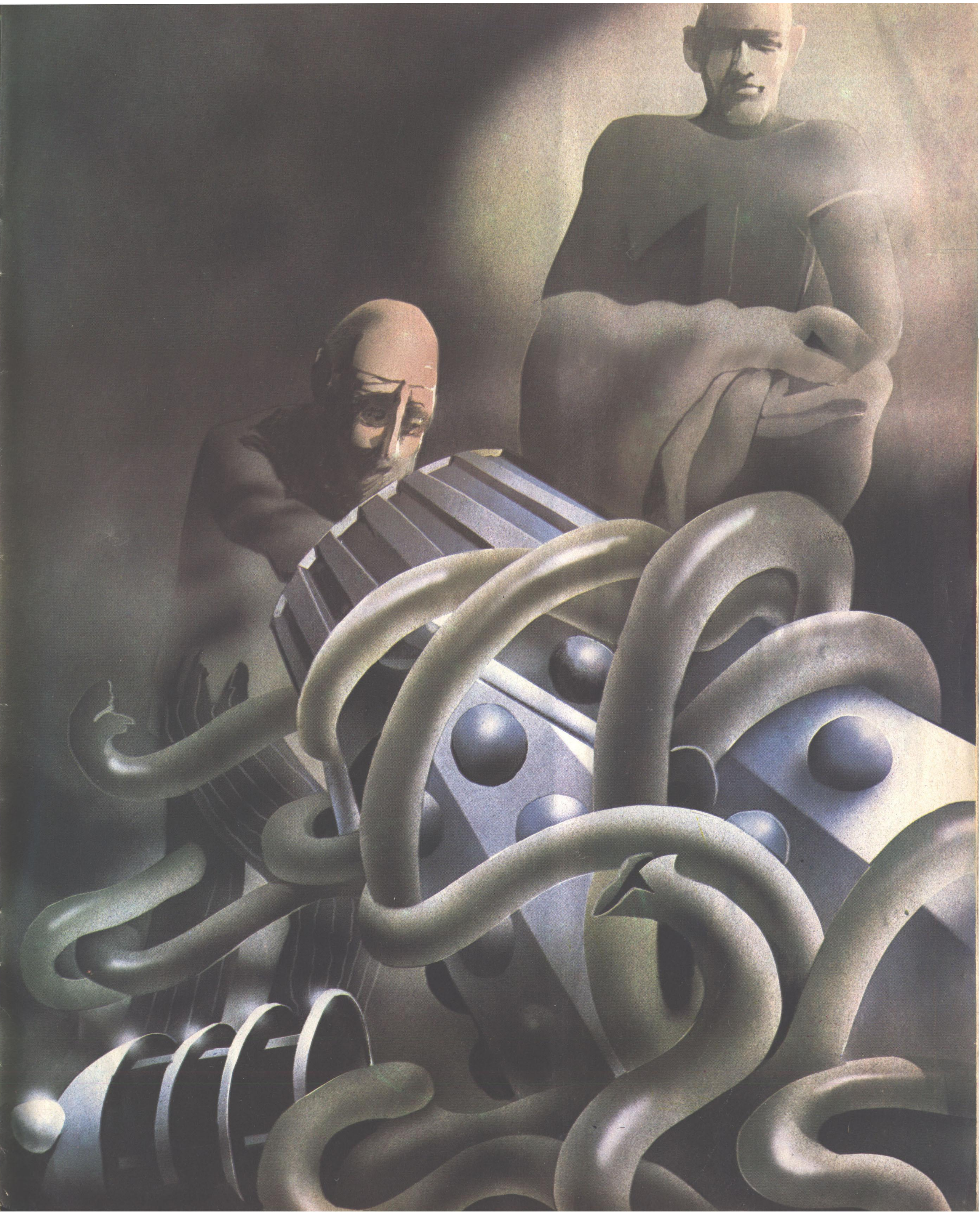
He opened his eyes and stared at me. 'We are,' he said. 'Man is the savagest animal, the most destructive force in the Universe.'

'No!' I said. 'The Daleks. We don't compare with them!' I was trying to find a defence for my species. 'They are total evil!'

He looked at me pityingly. 'Don't you understand even now?' he said. '*We are the Daleks. That is where our evolutionary line is taking us. That is what man became on Ameron! We are the Daleks!*'

Anderson was dead. I heard the grating noise as a Dalek scraped against the rock. I turned to face them. They grouped at the entrance . . . They started to fire.

©Terry Nation, 1973



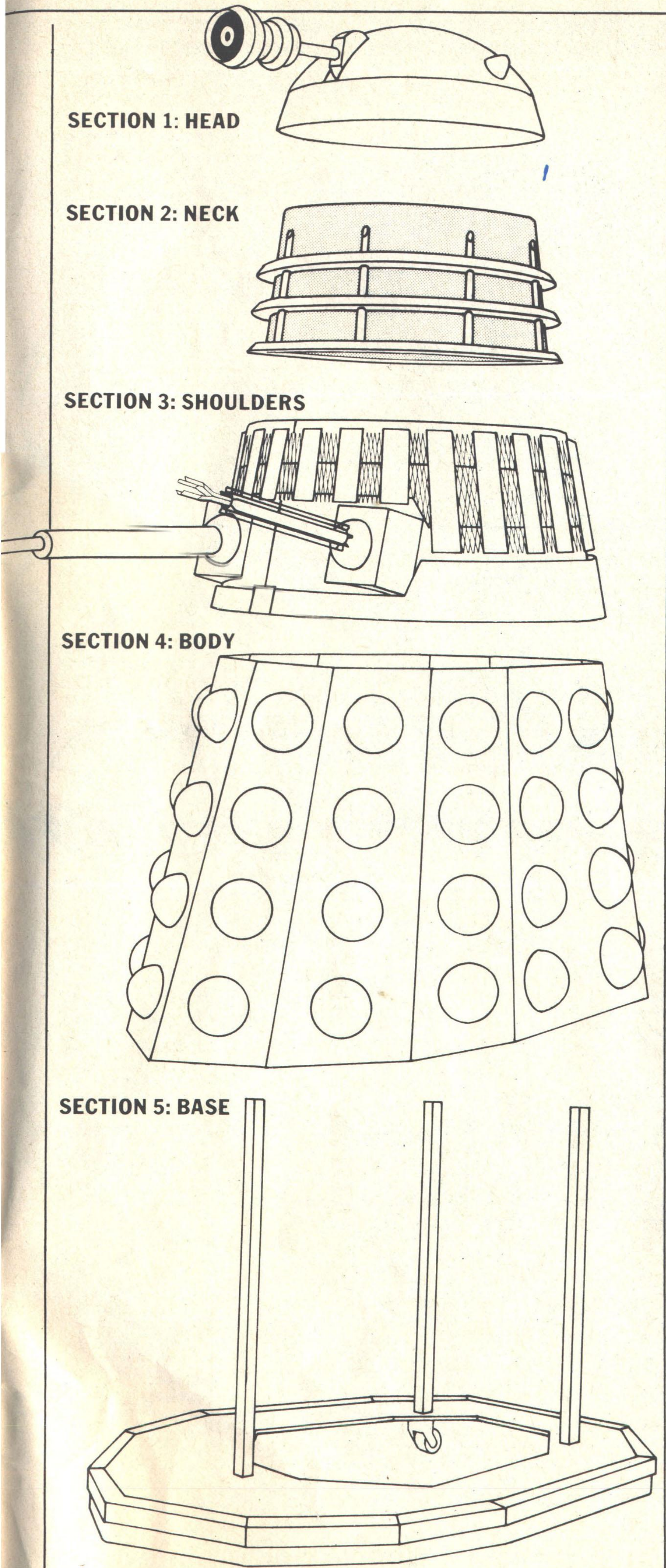
FRANK HAMPSON.

Now, after Terry Nation's spine-chilling Dalek adventure, the first-ever blueprint for constructing a Dalek . . .

HOW TO BUILD A DALEK

produced by

Deirdre Macdonald
Nigel Holmes



We have designed this Dalek as an exercise for a well-equipped school, using the resources and facilities of several departments–woodwork, metalwork, art and so on. It could also be built at home–but only by someone with considerable 'do-it-yourself' experience.

You do not need to be a professional to build a Dalek, but you will need some basic skills, precision, common sense and, above all, enthusiasm! You will need the use of some machinery, such as a woodworking lathe and a band or jig-saw. Don't follow our instructions too slavishly; do not be afraid to improvise.

For clarity, we have divided the Dalek into five sections: 1 is the head – and this needs a full week to complete; 2 is the neck; 3 is the shoulders; 4 the body; 5 the base.

The head could adequately be made from reinforced papier mâché instead of the more complex fibreglass. If you do decide to use fibreglass, exercise extreme care in the process: barrier cream should always be used to protect your hands and the fibreglass should only be handled in a well-ventilated area. Fumes can be unpleasant and dangerous in a confined space. Note well, too, that the accelerator and catalyst used must not be mixed together. That could be dangerous.

To make sure that this Dalek design works, we asked the Technical Sixth Formers of Highbury Grove School, London N5, to produce a Dalek as a feasibility study. With help from their staff, they produced the magnificent black-and-orange specimen *(below)* in two weeks, at a cost of £12.

'We based our Dalek on these plans for size and shape, but substituted materials that were to hand or more easily obtainable,' says the school's Head of Technical Studies, Don Jackson. 'And with careful marking out, pieces like the neck disc can come from the unwanted centre of the top of the body, and the top of the body can in turn come from the unwanted centre of the baseboard.'

Highbury Grove also cut costs by scrounging aluminium from a scrapyard for £1, instead of paying more than double from a stockholder. Don Jackson's verdict: 'A very worthwhile, enjoyable project. There is no process in construction that 12 and 13-year-olds could not do, with supervision.'

Finally, we wish you good luck!

[redacted]

These are the basic materials required to build a Dalek:

1 28 lb bag modelling clay
paper/polystyrene
1 roll 500 mm bandage
28 lbs fast-setting potter's plaster
4 sq yds hessian scrim
½ pint shellac
1 tin car wax polish
½ pint PVA release agent
2 oz accelerator
2 oz catalyst
strips of glass matt
2 lbs gelcoat resin
6 lbs layup resin
acetone
soap and water
1 tub barrier cream
sink plunger
2 car parking lights (for flashing lights on head)
2 6V 0·3 amp bulbs and holders
6 volt battery

[redacted]

1·5 mm ply	1 sheet	5 ft × 5 ft
6 mm ply	4 sheets	5 ft × 5 ft
9 mm ply	1 sheet	8 ft × 4 ft
15 mm ply	1 sheet	10 ft × 4 ft
12 mm wooden dowel		
27 mm wooden dowel		
2 wooden balls		95 mm diameter

[redacted]

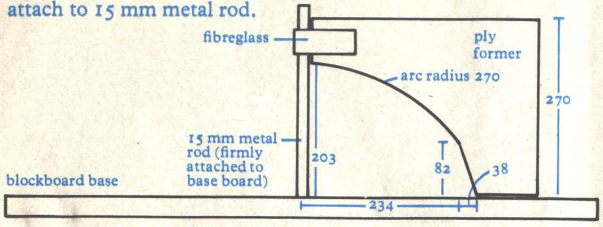
24 polystyrene balls
100 mm diameter
6 ball bearings 6 mm
30 gauge fine aluminium mesh 275 mm × 1470 mm
24 gauge large aluminium mesh (2 strips) 655 mm × 180 mm
aluminium 1425 mm × 150 mm
and two strips 651 mm × 10 mm
soft aluminium 40 mm × 170 mm
36 mm aluminium or plastic tube 455 mm
40 mm aluminium or plastic tube 615 mm
3 mm steel rod 315 mm
15 mm rod 270 mm
brass shim strip
aluminium angle
ribbed rubber flooring foam strip
3 plastic rotating castors
1½ in to 2 in diameter
perspex 2mm 80 mm × 80 mm
2 brass rings (internal diameter 28 mm, cut to 10 mm long)
screws, nuts, bolts, snap rivets,
fast-drying enamel paint
Approximate total cost: £15

SECTION 1: HEAD

All measurements in mm

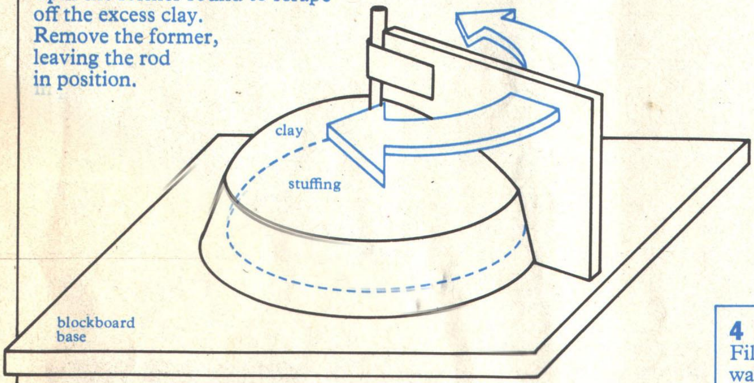
1 MAKING A FORMER

Take a suitable sheet of ply. Cut and shape to make a former . Using fibreglass, attach to 15 mm metal rod.


fibreglass
ply former
arc radius 270
270
15 mm metal rod (firmly attached to base board)
203
82
38
blockboard base
234

2 SHAPING THE CLAY

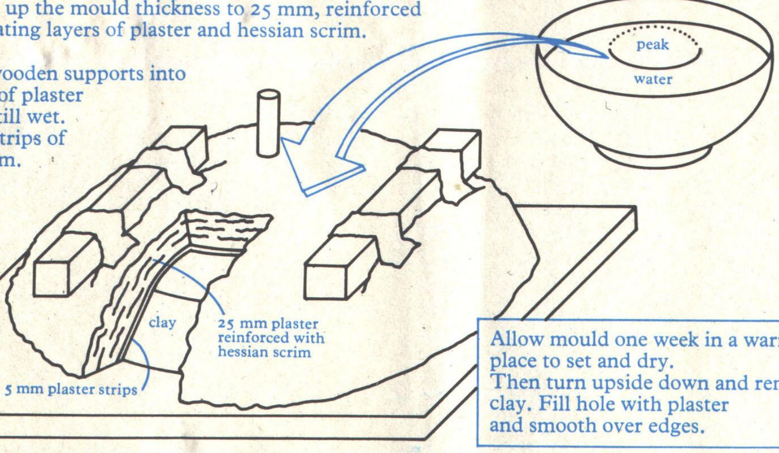
Build up soft clay on the base to approximate shape of the head. Pack the centre with paper or polystyrene to save clay. Spin the former round to scrape off the excess clay. Remove the former, leaving the rod in position.


clay
stuffing
blockboard base

3 MAKING THE MOULD

Cut plaster-bandage into strips of 500 x 800 mm each. Dip in water and lay over clay to 5 mm thickness. Allow 3 or 4 minutes to set. Next, mix plaster (see opposite for method). Then build up the mould thickness to 25 mm, reinforced with alternating layers of plaster and hessian scrim.

Press two wooden supports into outer layer of plaster while it is still wet. Bind with strips of hessian scrim. When dry, this makes a stand for the mould.


peak
water
clay
25 mm plaster reinforced with hessian scrim
5 mm plaster strips

Allow mould one week in a warm place to set and dry. Then turn upside down and remove clay. Fill hole with plaster and smooth over edges.

4 MIXING THE PLASTER

Fill a plastic bucket with 50-80 mm of water. Gently sprinkle in plaster until it forms a peak above the water line. Stir gently with hands. The mixture is ready when it does not run off the stick.

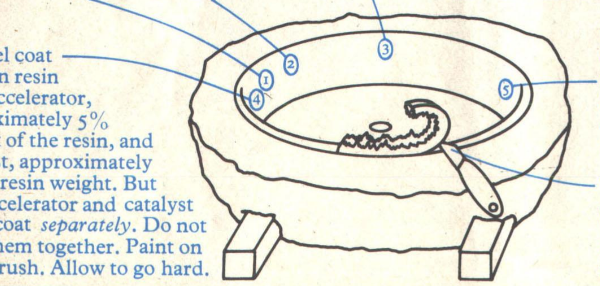
5 MAKING THE FIBREGLASS DOME

① Paint the inside of the mould with shellac and allow to dry.

② Apply three coats of wax car polish. Shine well to give a good surface.

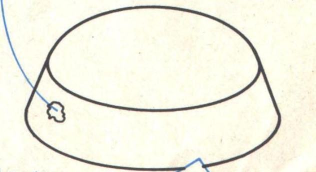
③ Using a soft cloth or sponge, apply layer of release agent. Allow 2 or 3 minutes to dry. Protect hands with barrier cream.

④ Mix gel coat ½ gallon resin with accelerator, approximately 5% weight of the resin, and catalyst, approximately 5% of resin weight. But add accelerator and catalyst to gel coat *separately*. Do not mix them together. Paint on with brush. Allow to go hard.



⑤ Mix layup resin with accelerator and catalyst. Clean brush in acetone. Wash hands in soap and water. Apply strips of glass matt to the mould and paint with resin. Continue this layering process until approximately 4 mm thick, or 3 layers of glass. Use a paint brush to punch out all the trapped air bubbles from the matt fibres.

When fibreglass is hard enough to cut, trim off the ragged edges with a sharp knife. Then allow it to 'cure' fully for about 24 hours in a warm room. Finally, remove from mould.

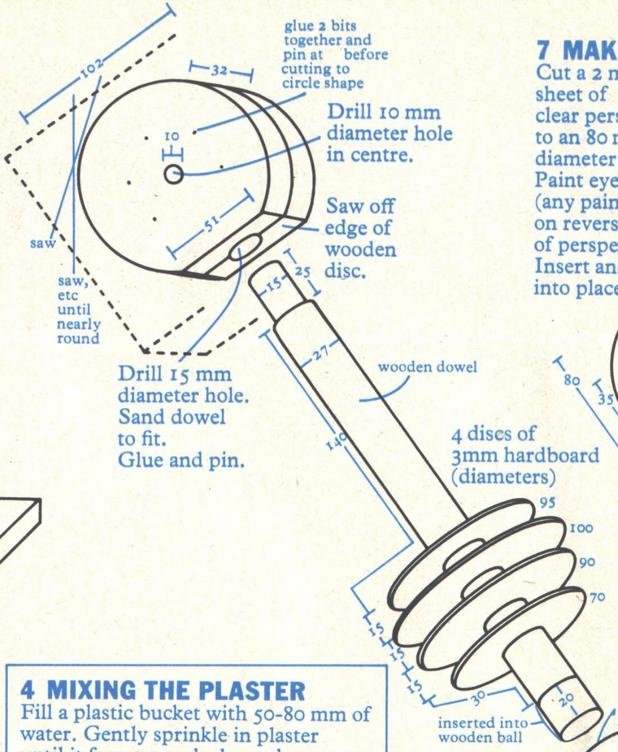


Wash the finished dome in warm, soapy water.

Sand surface of the dome with wet and dry paper and make good any defects by filling with fibreglass-putty.

6 MAKING THE ANTENNA

Stick 2 sheets of 15mm ply together. Draw 102mm circle on it. Saw off corners till nearly round. Chisel, file and sand with glass paper to make a perfect circle (or use woodworking lathe if available).


102
32
glue 2 bits together and pin at before cutting to circle shape
10
51
saw
saw, etc until nearly round
15
25
27
wooden dowel
140
95
100
90
70
15
15
15
15
30
20
inserted into wooden ball

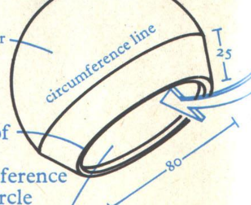
Drill 10 mm diameter hole in centre.

Saw off edge of wooden disc.

Drill 15 mm diameter hole. Sand dowel to fit. Glue and pin.

4 discs of 3mm hardboard (diameters)

Drill hole to same diameter as dowel, insert arm and glue

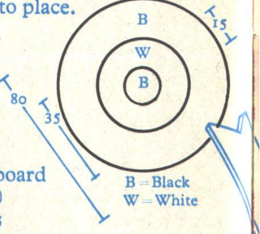

100 mm diameter wooden ball
circumference line
25
80

Saw off end of wooden ball. From circumference chamfer to circle of diameter 80 mm with spokeshave

Scoop out to depth of 80 mm on lathe

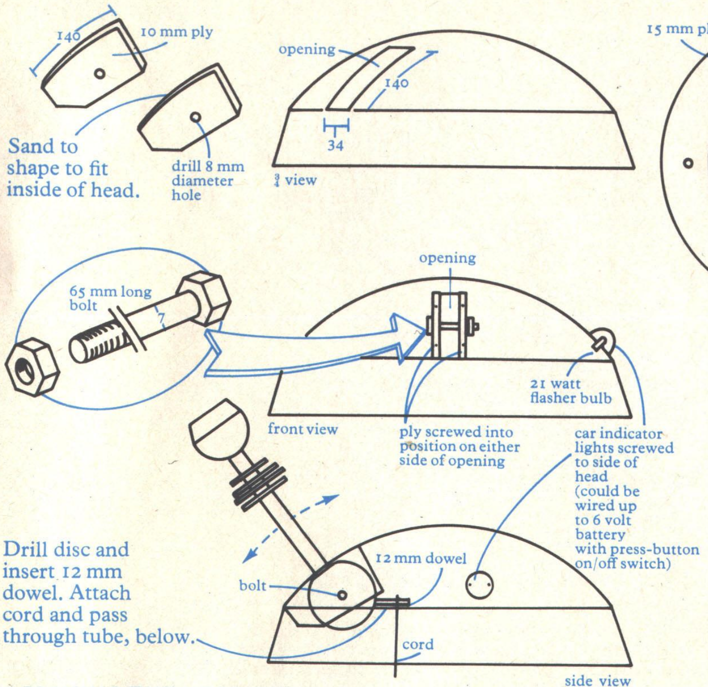
7 MAKING THE EYE

Cut a 2 mm thick sheet of clear perspex to an 80 mm diameter disc. Paint eye (any paint will do) on reverse side of perspex. Insert and glue into place.


B
W
B
15
80
35
B = Black
W = White

8 FIXING THE ANTENNA

Cut an opening 140 mm long, 34 mm wide, in the head.
Take two pieces of 9 mm ply and cut to shapes shown below.
Fix into inside of head with screws.
Fix antenna into position with 65 mm nut and bolt.

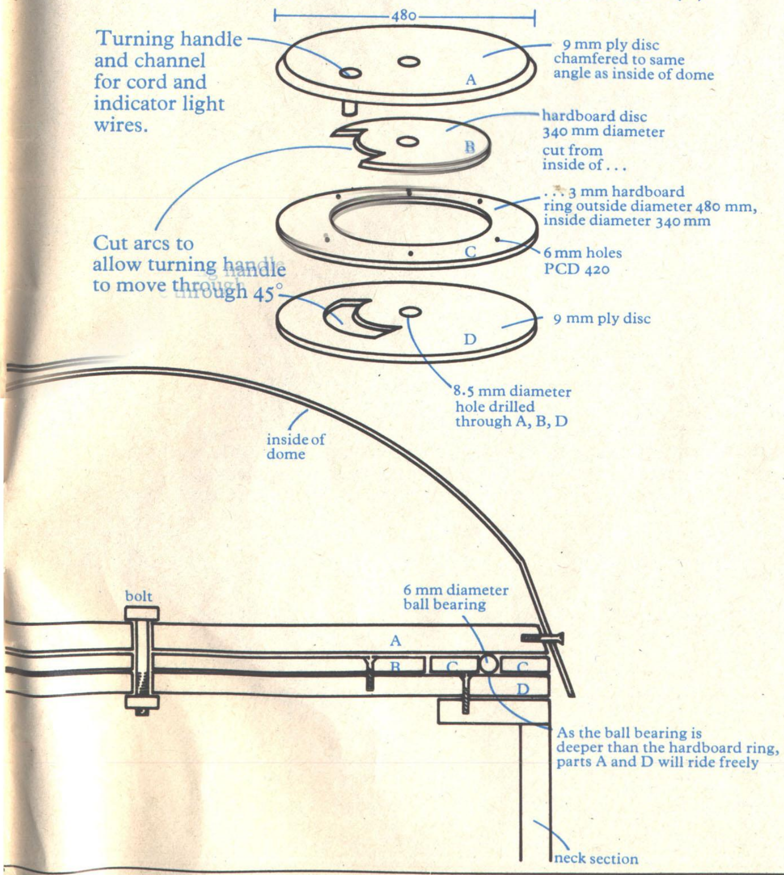

140
10 mm ply
drill 8 mm diameter hole
opening
140
34
¾ view
opening
65 mm long bolt
7
21 watt flasher bulb
front view
ply screwed into position on either side of opening
car indicator lights screwed to side of head (could be wired up to 6 volt battery with press-button on/off switch)
12 mm dowel
bolt
cord
side view

Sand to shape to fit inside of head.

Drill disc and insert 12 mm dowel. Attach cord and pass through tube, below.

9 MAKING THE HEAD TURN

From a sheet of 9 mm ply cut a disc 480 mm diameter (A) and another disc 480 mm diameter (D). From a sheet of 3 mm hardboard cut a disc 480 mm (C). From that disc, cut an inner disc 340 mm diameter, (B). Drill 6 evenly spaced 6 mm holes right through ring (to hold 6 mm diameter ball bearings). Assemble as below and screw dome to (A).


480
9 mm ply disc chamfered to same angle as inside of dome
A
hardboard disc 340 mm diameter
cut from inside of . . .
B
. . . 3 mm hardboard ring outside diameter 480 mm, inside diameter 340 mm
6 mm holes PCD 420
C
9 mm ply disc
D
8.5 mm diameter hole drilled through A, B, D
inside of dome
bolt
6 mm diameter ball bearing
A
B
C
C
D
neck section

Turning handle and channel for cord and indicator light wires.

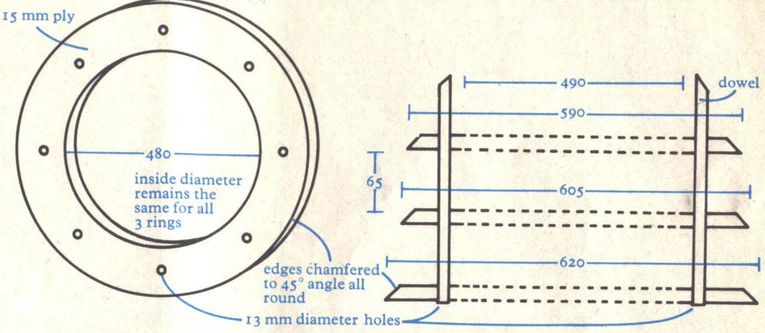
Cut arcs to allow turning handle to move through 45°

As the ball bearing is deeper than the hardboard ring, parts A and D will ride freely

SECTION 2: NECK

10 MAKING THE RINGS

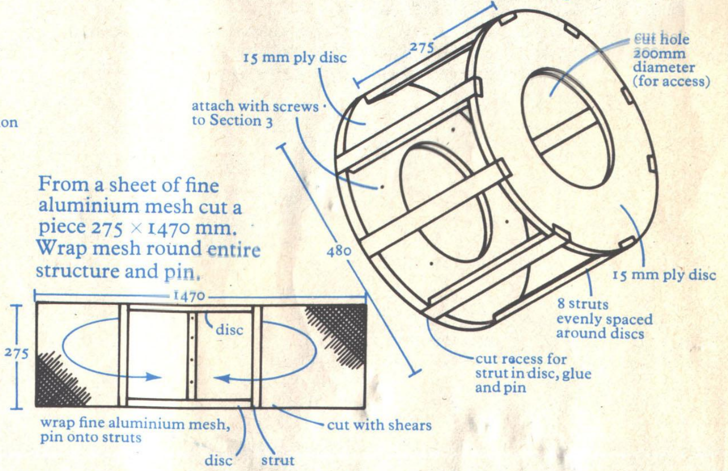
From a sheet of 15mm ply, cut 3 rings as shown below. Drill 8 evenly spaced 13mm diameter holes PCD 530mm. Insert 8 wooden dowels, 12mm diameter, 235mm long. Cut ends to same angle as inside of dome.


15 mm ply
480
inside diameter remains the same for all 3 rings
edges chamfered to 45° angle all round
13 mm diameter holes
490
dowel
590
65
605
620

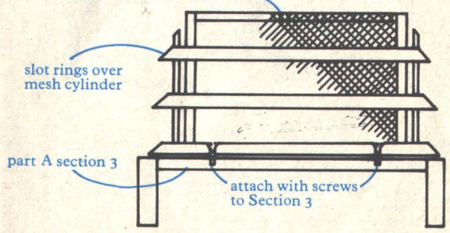
11 MAKING THE MESH CYLINDER

From a sheet of 15 mm ply, cut 2 discs 480 mm diameter. Cut 8 softwood struts 10 × 25 × 275 mm and assemble with discs as in diagram.

From a sheet of fine aluminium mesh cut a piece 275 × 1470 mm. Wrap mesh round entire structure and pin.


275
15 mm ply disc
attach with screws to Section 3
cut hole 200mm diameter (for access)
480
15 mm ply disc
8 struts evenly spaced around discs
cut recess for strut in disc, glue and pin
1470
275
disc
wrap fine aluminium mesh, pin onto struts
disc
strut
cut with shears

Fit the rings over the mesh cylinder.
Screw part D of Section 1 onto this surface.

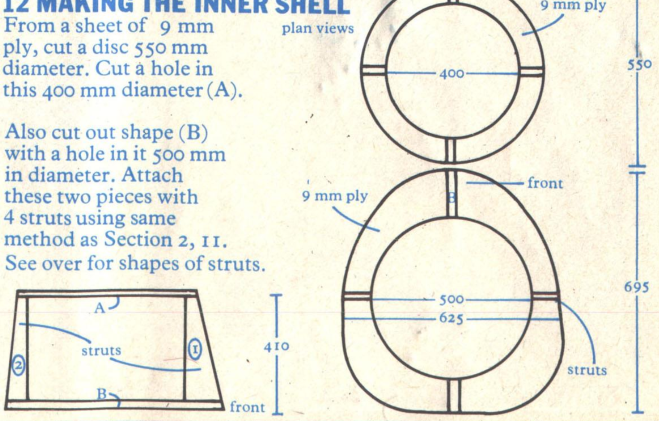

slot rings over mesh cylinder
part A section 3
attach with screws to Section 3

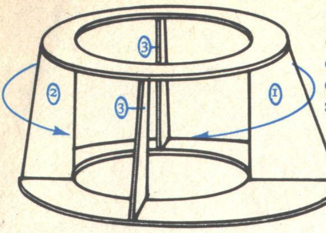
SECTION 3: SHOULDERS

12 MAKING THE INNER SHELL

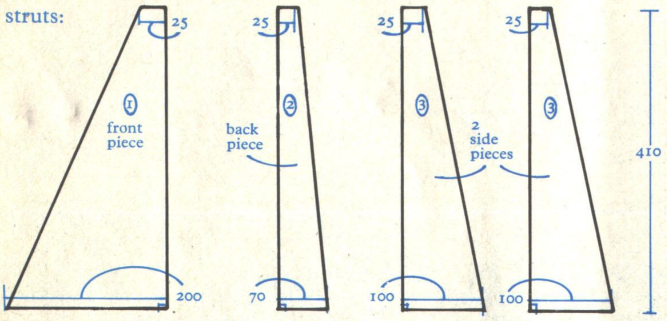
From a sheet of 9 mm ply, cut a disc 550 mm diameter. Cut a hole in this 400 mm diameter (A).

Also cut out shape (B) with a hole in it 500 mm in diameter. Attach these two pieces with 4 struts using same method as Section 2, 11. See over for shapes of struts.


plan views
9 mm ply
A
400
550
front
9 mm ply
B
500
625
695
struts
A
struts
②
①
410
B
front

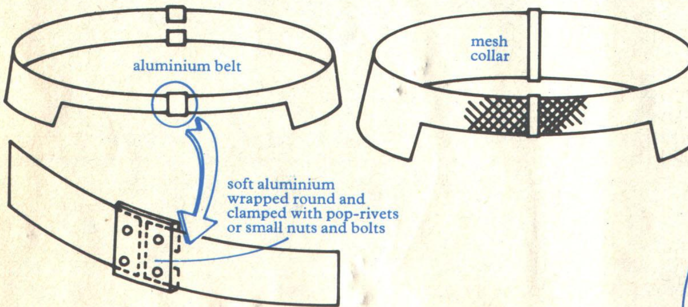


From a sheet of 1.5 mm ply, cut 2 strips to clad assembled structure.

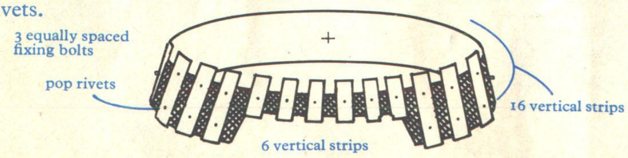

struts:
25
①
front piece
200
25
②
back piece
70
25
③
2 side pieces
100
25
③
100
410

13 MAKING THE MESH COLLAR

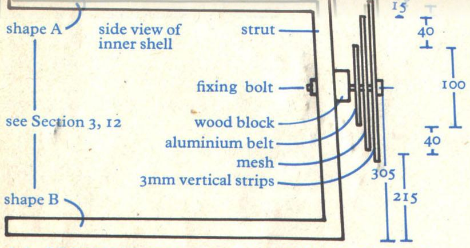
From a sheet of aluminium, cut 2 strips 651 x 10 mm. Join at front and back with a piece of soft aluminium 40 x 170 mm and clamp. From a sheet of large aluminium mesh, cut 2 strips 655 x 180 mm. This fits over aluminium belt. . .


aluminium belt
mesh collar
soft aluminium wrapped round and clamped with pop-rivets or small nuts and bolts

and is held in position with 16 vertical strips of 3mm ply 50mm x 215mm and 6 vertical strips of 3mm ply 50mm x 125mm, all anchored with pop rivets.

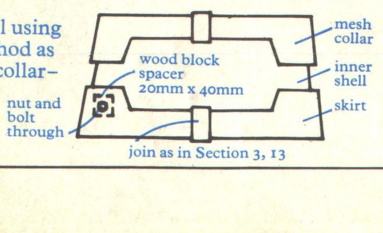

3 equally spaced fixing bolts
pop rivets
16 vertical strips
6 vertical strips

The aluminium belt and the aluminium mesh are separated from the inner shell by a block of wood 20mm thick, 40mm x 40mm, and fixed through to the shell with nuts and bolts.


shape A
side view of inner shell
strut
15
40
fixing bolt
100
see Section 3, 12
wood block
aluminium belt
40
mesh
3mm vertical strips
305
215
shape B

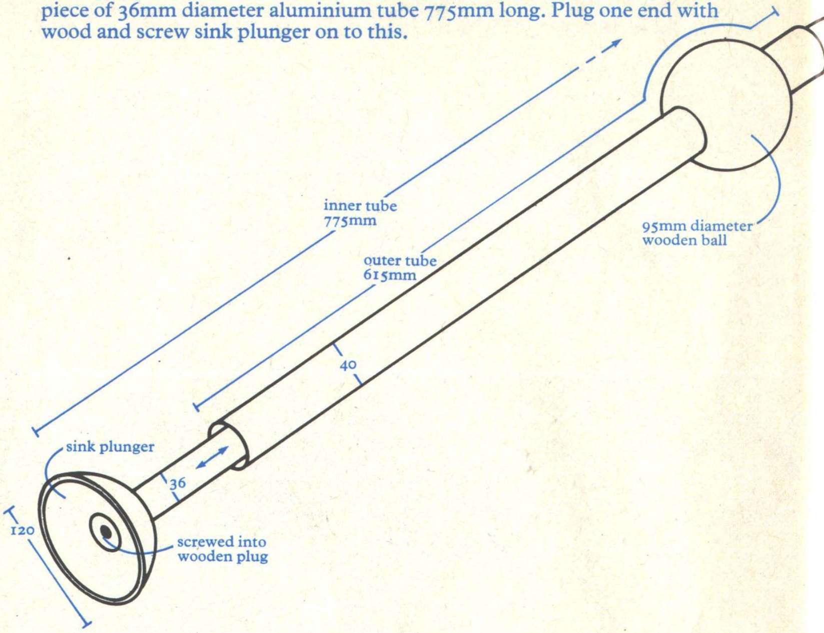
14 MAKING THE ALUMINIUM SKIRT

From a sheet of aluminium, cut 2 shapes shown opposite. Fix to inner shell using same method as for mesh collar–Section 3, 13.


mesh collar
wood block spacer 20mm x 40mm
inner shell
skirt
nut and bolt through
join as in Section 3, 13

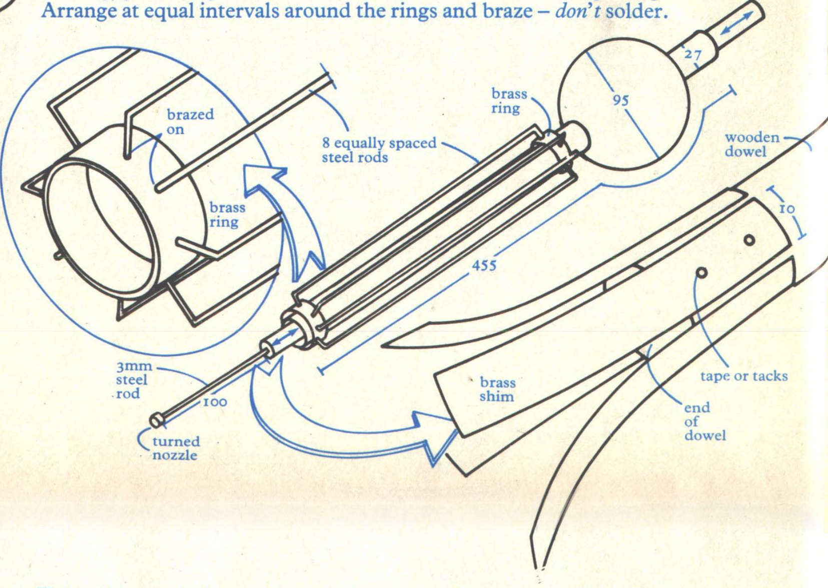
15 MAKING THE ARM

Cut a piece of 40mm diameter aluminium tube to 615mm long. Drill hole through 95mm diameter solid wooden ball and insert tube securely. Cut a piece of 36mm diameter aluminium tube 775mm long. Plug one end with wood and screw sink plunger on to this.

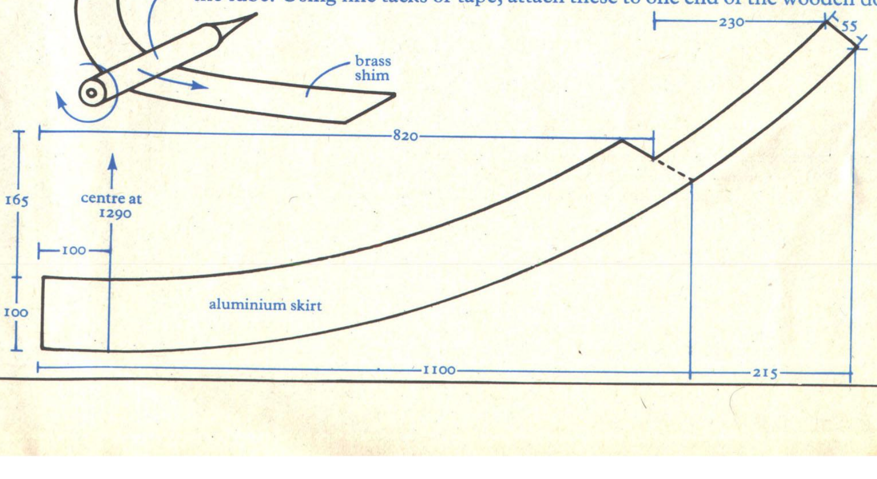

inner tube 775mm
outer tube 615mm
40
95mm diameter wooden ball
sink plunger
36
120
screwed into wooden plug

16 MAKING THE EXTERMINATOR

Cut a piece of 26mm diameter aluminium tube to 455mm long. Drill a hole in identical wooden ball and insert tube as shown in Section 3, 15. Fix 2 brass rings in position as shown. Cut 8 equal lengths of 3mm steel rod to 315mm long. Bend 10mm at either end of each to a right angle. Arrange at equal intervals around the rings and braze – *don't* solder.

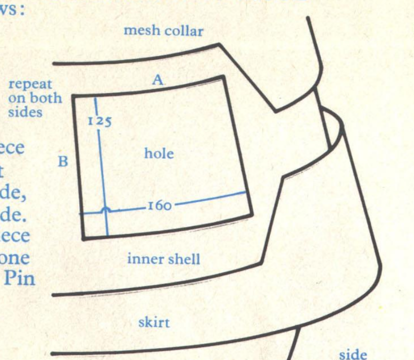

brazed on
brass ring
8 equally spaced steel rods
brass ring
95
27
wooden dowel
10
455
3mm steel rod
100
turned nozzle
brass shim
tape or tacks
end of dowel

Take 4 identical pieces of brass shim 100mm long, 10mm wide. Roll them tightly round a pencil so that they will spring open when pushed out of the tube. Using fine tacks or tape, attach these to one end of the wooden dowel.

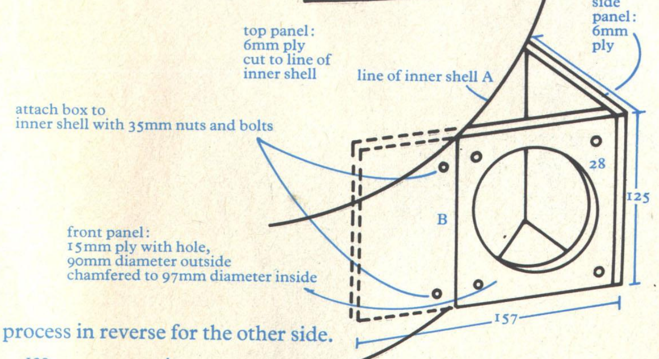

brass shim
230
55
820
165
centre at 1290
100
100
aluminium skirt
1100
215

17 MAKING THE ARM AND THE EXTERMINATOR MOVE

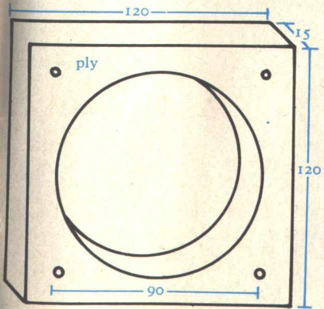
Cut holes in the inner shell as follows:


mesh collar
A
repeat on both sides
125
hole
B
160
inner shell
skirt

From a sheet of 15mm ply, cut a piece 125mm x 157mm (front panel). Cut a hole in this 90mm diameter one side, chamfered to 97mm on the other side. From a sheet of 6mm ply, cut one piece 125mm x 112mm (side panel), and one piece 112mm x 135mm (top panel). Pin and glue these together to form a 3-sided box as shown below.


side panel: 6mm ply
top panel: 6mm ply cut to line of inner shell
line of inner shell A
attach box to inner shell with 35mm nuts and bolts
28
125
B
front panel: 15mm ply with hole, 90mm diameter outside chamfered to 97mm diameter inside
157

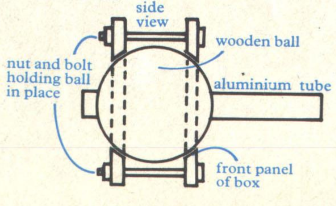
Use same process in reverse for the other side.


120
15
ply
120
90

From a sheet of 15mm ply, cut 2 pieces 120mm square, each with a hole in the centre 90mm diameter on one side, chamfered to 97mm diameter on the other.

Next, drill 4 holes 4mm diameter in the front panel of the box at ○ and 4 identical holes in same positions through separate ply shape shown opposite.

Assemble arm and exterminator as shown below.

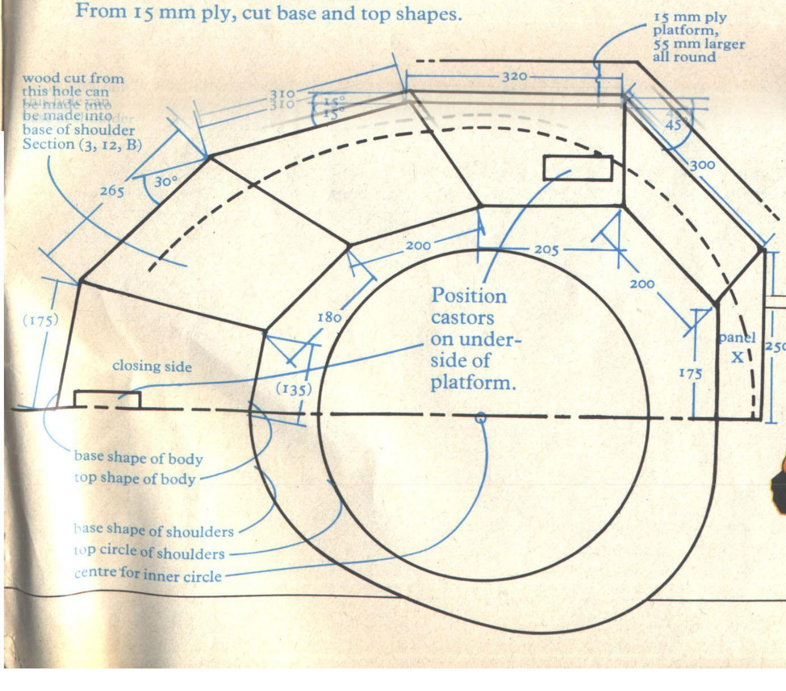

side view
nut and bolt holding ball in place
wooden ball
aluminium tube
front panel of box

Adjust the tension of the nuts and bolts until the arm and the exterminator can be moved freely but are held in place.

SECTION 4: BODY

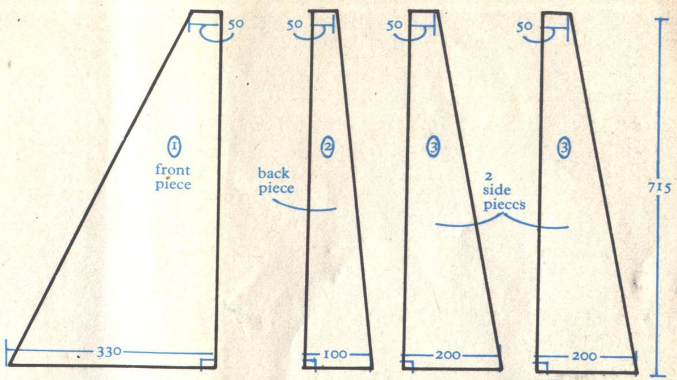
18 MAKING THE FRAME

From 15 mm ply, cut base and top shapes.


15 mm ply platform, 55 mm larger all round
wood cut from this hole can be made into base of shoulder Section (3, 12, B)
310
15°
320
45
300
265
30°
200
205
200
180
(175)
Position castors on under-side of platform.
panel X
250
175
closing side
(135)
base shape of body
top shape of body
base shape of shoulders
top circle of shoulders
centre for inner circle

19 ASSEMBLY

From a sheet of 15 mm ply, cut these shapes and assemble as in 3, 12.

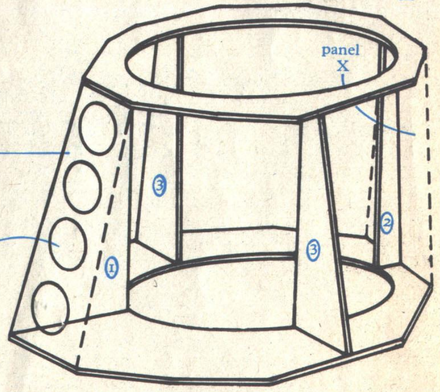

50
50
50
50
①
front piece
②
back piece
③
③
2 side pieces
715
330
100
200
200

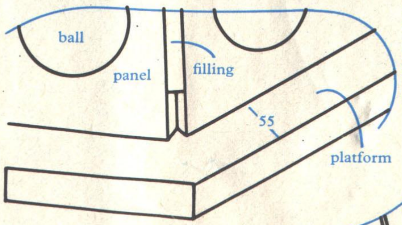
20 CLADDING

Clad frame with 11 panels of 6 mm ply.

21 DECORATING THE PANELS

Cut in half 24 polystyrene (or similar) balls of 100 mm diameter, and glue to panels – 4 to each, except for panel X, which has 8.


panel X
③
②
③
①

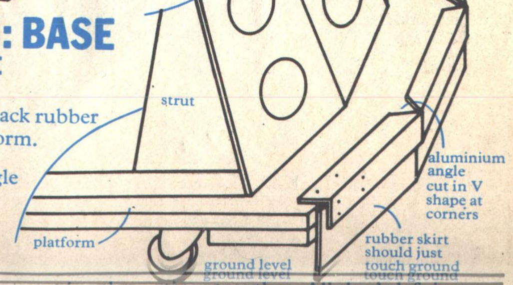

ball
panel
filling
55
platform

Fill up gaps left between the panels with Polyfilla or plastic wood. Sand to a smooth finish.

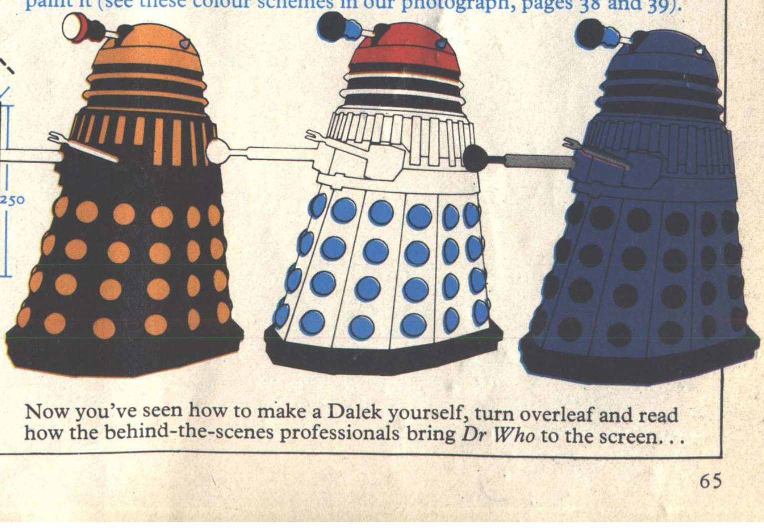
SECTION 5: BASE

22 MAKING THE RUBBER SKIRT

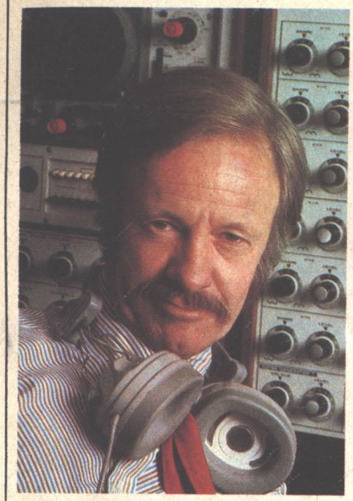
Cut a strip of thin black rubber to encircle the platform. Screw into position with aluminium angle


panel
strut
aluminium angle cut in V shape at corners
platform
rubber skirt should just touch ground
ground level

Assemble the Dalek, screwing the sections together. All that's left is to paint it (see these colour schemes in our photograph, pages 38 and 39).



Now you've seen how to make a Dalek yourself, turn overleaf and read how the behind-the-scenes professionals bring *Dr Who* to the screen. . .



'I'm a serious writer, really,' says **musician Dudley Simpson.** 'A big ambition of mine is to write a ballet. I used to be the principal conductor of the Royal Ballet's touring section and I conducted in the Royal Opera House for two years, as well as being Dame Margot Fonteyn's musical director on two world tours.

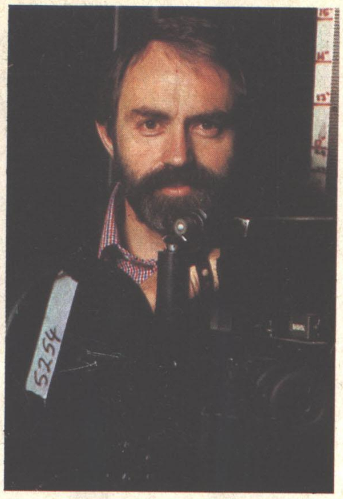
'I first wrote incidental music for *Dr Who* back at the beginning, ten years ago. Since then it's escalated and now I do all the *Who* music, though it was Ron Grainer – an Australian like myself – who composed the theme music. I compose the music to picture and normally have two days to write two episodes. What I do is mix "live" music with synthesised electronic sounds.

'I use about five musicians normally, who sometimes double-up on instruments. I go in a lot for keyboard sounds – electric pianos, organs or harpsichords rather than concert grands – but I use clarinets, oboes and saxaphones a lot, too.

'I see the synthesiser as an extension of the orchestra, not a replacement of it. It has a keyboard – which I play – and when we've pre-recorded the "live" sounds I take them to the BBC's Radiophonic Workshop and lay on the synthesised music.

'I always find *Dr Who* very hard to write for. Some of the stories are romantic, some dramatic, some straight sci-fi. But I always treat it as serious drama and try to give the music a sense of doom.

'For instance, in one episode there was a lot of action in space. We wanted to use sound-effects for the firing of the spaceship's rockets, then we realised that you wouldn't hear any noise in space, because there's no air. So when the rockets fired we had musical passages which denoted which were the goodies and which the baddies. I don't think *Dr Who* would work without the music.'



'There is a much heavier demand for TV graphics now than there was when *Dr Who* started ten years ago,' says **graphics designer Bernard Lodge.** 'There are two major aspects to the work. The most widely used is of course the title sequence, which supplies a sort of shorthand imagery of the programme.

'I was first asked to work on *Dr Who* at the beginning by its original producer, Verity Lambert. The "background" to the title sequence had already been produced – an electronically-generated pattern which made super pulsating shapes. I was asked to provide animated lettering to fit in with it. I thought that superimposing lettering would look crude, so we set up a special electronic session, technically supervised by Ben Palmer, so that we could feed the lettering as a signal into the pattern. So the lettering itself was pulled and distorted, and actually contributed to the pattern.

'We noticed during the session that if a face was used instead of lettering the same effect was achieved – an amazing distortion. When the Patrick Troughton version came along we used this face distortion as the main element. The third set of titles were in colour and we again used a face – Jon Pertwee's.

'The new title system is totally different, but just as complex. It's a time-exposure process often referred to as slit-scan, pioneered by an American, John Whitney. It was developed in a big way by Douglas Trumbull for Kubrick's *2001*, where it was used in the tour of the stars sequence. I used it to provide the "space tunnel" which, at one point, is *Dr Who*-shaped.

'I've tried not to make the titles horrific. I wanted to give an impression of space-and-time travel, but a sense of magic, too. The music itself has a sinister quality and I didn't want to add to that.'

'*Dr Who* is a real team effort and that, for me, can produce TV at its finest,' says **scenic designer Roger Liminton.** 'All the best TV comes when people lose their ego and care more about the programme than pushing their own individual ideas.

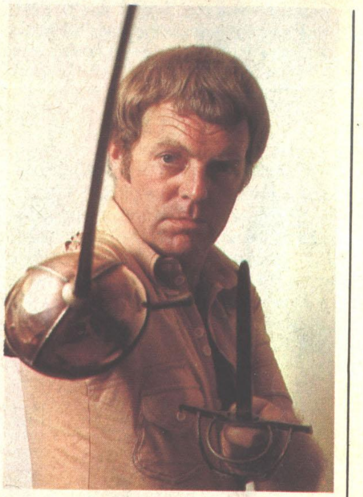
'I've worked on programmes from *Steptoe and Son* to *Z Cars*, but *Dr Who* appeals so much because it allows me to use my analytical approach to design. I suppose I'm slightly puritanical in my approach, anyway, but I've never leaned towards period drama. For better or worse I like a clean, crisp look. I'm a tidy little fellow. I don't think my designs have been influenced by science fiction films, or anything like that.

'With *Dr Who* you get an amazing cross-section of sets. I've designed things from the hold of a cargo ship to a futuristic city on another planet. One of the most exciting things I had to do was the inside of a piece of gigantic electronic machinery which the Doctor and Jo had to climb around on, looking miniaturised. I based that design on a tiny printed circuit which gave lots of jutting ledges to clamber on.

'Most of the sets are made from a softwood framing with hardboard construction, but the programme also allows you to use special materials like perspex and PVC.

'For colour TV I find, on the whole, that the less colour you use in the set the more impressive it looks. It's very easy to fall into the trap of using a lot of colours, which can ultimately look a distracting blur. I try to stick to one predominant colour.

'I discuss my plans with the director after reading the script, and then get down to a detailed design. There's nothing haphazard about it. You've got other people to consider – camera positions and lighting and sound crews as well. *Dr Who* presents a challenge.'



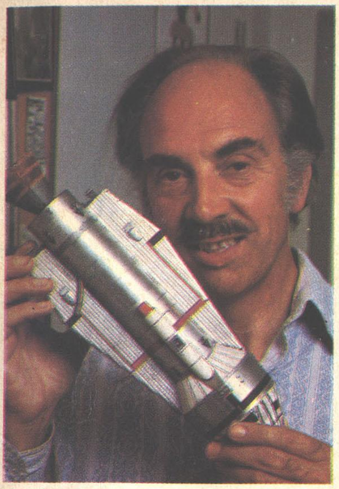
'*Dr Who* is a great programme for me because it's so wide-ranging,' says **stuntman Terry Walsh.** 'You get virtually everything and you never know what's coming next. I've been involved in sword fights, gun fights and motor chases. I've been knocked down and blown up. I've been run down by a car and banged over an 80ft bank. I've had stair falls, cliff falls, car falls, falls from ladders, falls on to boxes, falls into water. And once I put my back out.

'The first time I appeared in *Dr Who* was during the William Hartnell days. The Doctor was involved with pirates and six of us had to stunt a fight between the pirates and the revenue men. That was a real laugh. The trouble was there weren't enough of us to go round, so as soon as one went down with a sword thrust he'd crawl away behind a gravestone, put on a different wig and hat and come storming back into the fight again.

'I'm proficient with most weapons and can drive virtually anything from a motorbike to a Centurian tank. Aikido is a Japanese form of unarmed combat and virtually non-aggressive. As a defensive technique I thought it very fitting for the Doctor and now it's been introduced into the script.

'I also do fight arrangements for the programme and double for Jon Pertwee. He's about an inch taller than me and a bit beefier, but we look physically similar. Occasionally his wife complains bitterly about the dangerous things he's made to do, not realising it's actually me doing them!

'Sometimes Jon and I argue about a stunt. If it's not dangerous and it looks fun – like falling over backwards from a whack – he likes to do it himself. "All right," I say. "But make it look difficult or I'm out of a job!" It's become a joke. I'll be about to do a 60ft fall or something hairy and Jon will shout out: "Make it look difficult!" '



'Special effects are a combination of engineering and artistry, with a spot of conjuring thrown in, says **senior visual effects designer Bernard Wilkie.** 'We try some pretty ambitious things with *Dr Who,* though we can't always match the work of the cinema.

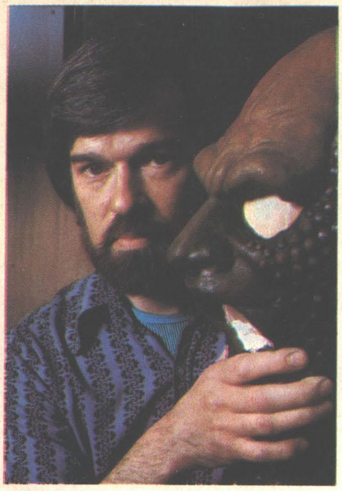
'Often we do get effects that look as good as film effects, though to do this we have to cut corners alarmingly. In the rapid world of TV it is essential to operate very swiftly and that is where our expertise comes in. We tend to cannibalise. A spaceship one day can finish up as part of the equipment on a control bench the next.

'I joined the BBC as an engineer in 1948 and six years later formed the effects department with scenic artist Jack Kine. It was the first full-time TV effects department in the world and we're now 28-strong. Our beginnings were very much in the *Dr Who* mould. The first thing we worked on was the *Quatermass* series.

'For the monster we used a hand in a rubber glove writhing about in a bowl of soup. Filmed in slow motion it looked superb and had people on the edge of their seats.

'We were in at the start of *Dr Who* and I remember wondering then if the programme was even going to interest the audience it was intended for. The idea of a police box as a spaceship and a funny old doctor as the hero seemed too bizarre by far. But it caught on immediately.

'Explosions and models still take up a lot of our time. Most of our models now are spacecraft and we have our own model stage to do the filming on and often direct our own sequences. Flying models are nearly always worked electrically and are hung on two small steel wires, through which electricity can be passed. If the wires are showing we film the model upside down. People aren't as conscious of wires below an object as they are above it.'



'I trained as a **sculptor,** so although my official title is "effects designer" I tend to concentrate on the sculptural side, says **John Friedlander.** 'I always seem to get involved with the Grand Guignol type of programme and end up producing dead bodies, decapitated heads and cut-off hands! I've worked on *Dr Who* from the early days, mostly making masks.

'The close-fitting face mask, as opposed to the type of monster head that just slips over the actor's head, is nearly always modelled to the face of the actor who's going to wear it. That way you get a perfect fit, but it also allows you to keep some of the actor's basic features in and get a more "believable" look.

'I start by taking a face-cast – a plaster mould of the actor's face. I first vaseline his face and then cover it in plaster bandages which set in about five minutes and can be lifted off. Then I take a clay impression from the mould and build up the back of the skull, so I've got a perfect replica of the head.

'Now I can start to model my mask around the head – extending his head to the monster shape. I then take a plaster mould of that. This is the final mould and I run thin latex rubber into this to make the mask.

'A new and very useful technique I now use is to mix a finely-ground silica powder with the latex. This makes the rubber react like clay so you can actually model the mask in rubber. The Draconian mask was made like this.

'Making a mask or a head is a close collaboration with a lot of people. I have a conference early on with the writer, the director, the producer and the make-up and wardrobe departments. Sometimes I design the basic monster-suit as well as the heads. I did that with the Sea Devils, who had a turtle-like head which was worn as a sort of hat. The actors looked out through the necks.'

'I had done a little science fiction work before *Dr Who,* with programmes like *Out of the Unknown,*' says **costume designer Barbara Lane.** 'But I like doing all sorts of design – everything from classic serials to light entertainment. *Dr Who* always presents special problems. The script provides you with a framework to build your monsters round so at least you know whether it's smooth or hairy, six-armed or two-armed. But the big problem is that the costume has to fit over a human shape and yet disguise the fact there's a man or woman inside.

'Inspiration can come from many directions. Prehistoric monsters are always good for research, so I often go round the museums or look up books before starting a design. The people who the Doctor found in Atlantis were in costumes based on ancient Cretian wall-paintings.

'As for materials, I try to use anything new that comes on the market. Plastic materials normally used for industrial purposes prove very useful, because they can be moulded to many different shapes and they're light to wear. If you make costumes too heavy you're likely to find people fainting in them – we had that with the early Cybermen costumes, which were so bulky they had to be held together with nuts and bolts. I often use latex rubber, and the large solid costumes are usually hung around a cane frame. For hairy creatures I sometimes use a man-made fibre which is normally used for rugs.

'Costumes for the "ordinary" characters are easier. I wanted Katy Manning to look a little way-out, yet be dressed in practical clothes because of all the chasing about she had to do. That's where a trouser suit comes in handy. Jon Pertwee came up with his own designs originally, but I wanted him to look a little trendier, so I designed him a rather smart smoking jacket and a tweed cloak – but still cut on Victorian lines.'

'I'm a character actor, says **monster man John Scott Martin.** 'I've played everything from a bishop to an alcoholic. I was clerk of the court in one episode of *The Forsyte Saga,* a sailor in *The Onedin Line* and a Dalek and various other monsters in *Dr Who.* There are six of us who are sort of "steady" monsters. Like a little club, really. Some actors may be a bit snobby about it, but we look on it as an ordinary TV acting job.

'I've worked with all the Doctors. I started off as a Zarbi (the huge ant) but I've also been a Mutant, which is like a life-sized scampi and rubberised, so it's devilish hot inside. The Zarbi was my most difficult one. You have to crouch right down in that one. It's made of fibre-glass and steel, so it's like stumbling along with a single wardrobe on your back. You can't stand up. I tried. I flicked my tail over the edge of a rostrum I was standing on, overbalanced and landed on my back six feet below, floundering like an overturned beetle. They thought I'd killed myself, but I was quite happy.

'A Dalek is fun. It's like a bubble-car on castors and you sit inside and trundle it along with your feet. It gets a bit hot and claustrophobic at times, but at least you can sit down. Inside there's a bit of gadgetry to work to operate the lights, the eye-stick and the gun.

'We don't actually say the lines, there are specialist voices for that, but we do have to learn them. We press a button inside the Dalek to cue in the lines from the control room. Anyway, you need to know the lines at rehearsal so that the other actors can react to you and you don't just stand around like a pepper-pot.

'Being a Dalek can be a bit dangerous. Once my Dalek was supposed to blow up, but things went wrong and it caught fire. I had to be hauled out quick!'.